

Purchase of Telecommunications Services (POTS)



SUNBELT
CLIENT GUIDE FY2003
*Telecommunications
Support into the Future*



**Black Box Network Services, Inc
- Government Solutions**

1-800-766-POTS (7687)

**Service Areas: AL, FL, GA, KY, MS,
NC, SC, TN**

**Contract Number: GS-04K-97-BFD-0100
U.S. General Services Administration
Federal Telecommunication Services**

INTRODUCTION

*This guide is designed to assist Federal Agencies in the use of the General Services Administration's (GSA) Purchase of Telecommunications (POTS) contract for the **Southeast Sunbelt Region states of AL, FL, NC, SC, and MS**. Chapters 1 through 4 cover the basic provisions of the contract while the appendices are primarily to be used as working documents. This Client Guide is not intended to be an exact copy of any contract; however, Chapters 1 through 4 cover most of the major provisions. The appendices provide summarized ordering information. For example, Appendix 3 list prices, by category, for the telephone items and services offered under the contract. Appendix 8 provides a Point of Contact (POC) list with names, addresses, and phone numbers. These POC's are available to answer questions that the user may have regarding the POTS program.*

It will become apparent that additional responsibilities for managing telecommunications systems are placed upon each user. Due to the evolution of technology and the resulting lower costs, the GSA has determined that there are significant economical and technological benefits to self management of telecommunications. Accordingly, the GSA has transferred to its POTS contract user agencies the ordering, accountability, maintenance, and payment responsibility for telecommunications. In turn, the GSA has assumed the responsibility for competing and administering telecommunications contracts.

Telephone items and services (such as installation) may be ordered directly from the POTS contract via any official obligating document. Agencies should continue to order line services (such as dial tone) through GSA (as applicable) via standard form 145, "Telephone Service Request".

In the event of a conflict between this guide and the POTS contract, the contract shall prevail. A copy of the contract is held by GSA's Administrative Contracting Officer (ACO) and/or the Contracting Officer's Technical Representative (COTR).

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CHAPTER 1 - GENERAL PROVISIONS

1. **General Provisions.** Chapter 1 covers some of the general provisions of the POTS contracts, including ordering. The appendices provide summarized ordering information, prices, sample purchase orders, and other useful information.
2. **Scope Of Contract.** The POTS contract provides for Federal agencies to purchase, and the POTS vendor to provide telephone station equipment and miscellaneous items, such as buzzers, line status indicators, long handset cords, and cabling. Services associated with installing, repairing, wiring, and rearranging equipment purchased under this contract are included. Services for non-contract Government owned equipment, which the contractor elects to maintain, are also included. Specific items must be provided by the contractor as shown in the price tables (Appendix 3).
3. **Term Of The Contract.** The basic term of contract GS-04K-97-BFD-0100 begins on October 1, 2002 and extends through September 30, 2003.
4. **Non-Mandatory Use.** Use of this contract is non-mandatory for all Federal agencies.
5. **Reserved.**

6. Purchasing Small PBX's. Digital PBX's of 500 lines or less are available to users (Tables I and J). Users may purchase small PBX's at any time during the contract period. However, lease-to-own plans (LTOP) must take place within 60 months after contract award to accommodate the 60-month LTOP period and to preclude the Government from extending its 10-year contract period.

7. Agency Responsibilities. Any agency using the contract has the primary responsibility for the administration of any order it places. This includes placing orders directly with the Contractor, making payments, inspecting, accepting or rejecting the services performed, and terminating orders for default when warranted. Any default actions must be coordinated with GSA's contracting officer listed in Appendix 8.

a. Purchase Orders. Each agency will issue purchase orders to the contractor and comply with invoicing procedures using normal procurement procedures.

b. Inventory Control. Each user is to establish and maintain a telephone control system in accordance with the local user policy. An efficient inventory system is the basis of telecommunications planning.

c. Line Orders. GSA manages consolidated switching systems that provide long distance FTS service and local commercial service for its customer agencies. All services related to assigning dial tone, telephone numbers and optional features are ordered through GSA, via Standard Form 145 (SF-145). Agencies should contact GSA (Appendix 8) to determine what type of service to list on an SF-145.

8. Contract Compliance. The GSA Contracting Officer's Technical Representative (COTR) monitors the Contractor's performance, resolves disputes, and ensures compliance with the contract requirements. In the event of suspected breaches of contract, agencies should immediately prepare a noncompliance report (Appendix 9) and forward it to the GSA COTR. Delays in submitting any noncompliance reports could result in the Government accepting substandard performance by the Contractor.

9. Blanket Purchase Arrangement (BPA). Any Federal agency that uses this contract may enter into a blanket purchase order agreement or basic ordering agreement. Only those items covered by the contract may be ordered under the agreement. The period covered by the agreement may not exceed the contract expiration date (or any renewal date), and orders placed under the agreement must be in accordance with all applicable regulations and the terms and conditions of the POTS contract. All work completed, accepted and invoiced under a BPA must be paid upon receipt of the invoice.

10. Price Tables. Prices for purchasing telephone equipment and related services such as installation and maintenance are included in Appendix 3. GSA may issue new prices each October 1 if price adjustments occur (due to an Economic Price Adjustment clause of the contract). Specific items must be provided by the Contractor as shown in the various price tables.

11. Training. The Contractor shall provide, at no additional cost, on-site training in the proper operation of equipment purchased from all equipment tables in Section B of the POTS contract to ordering agency personnel, as requested by the customer in the delivery order. Training sessions may occur only twice: the first within one (1) working day of installation or cutover, the second, if requested by the agency, within 30 days of the initial training. The second training session will be provided by the Contractor within five (5) working days of request. All training will be performed by a Customer Service Representative (CSR) or a more experienced training representative. Training shall include station user training, feature operation, applicable manuals, guide sheets or forms, and any other media necessary for the training of personnel up to groups of twenty (20).

Training needed in addition to that described above must be user funded and shall be provided at the hourly training rate as indicated in Price Table D of Section B of the POTS contract. Follow-on training shall be equal in scope and duration to that provided in the initial training session(s).

12. Direct Ordering. Each agency will place orders directly with the Contractor. All orders issued before the contract expires will be honored and performed by the Contractor according to all terms and conditions of the contract. Agencies may use any legal Government obligating document to order any equipment or service under this contract. The ordering agency should be aware that orders of less than \$50.00 may not be honored. It may behoove the agency to save small orders until the total value exceeds the \$50.00 minimum. See Appendix 5 for ordering procedures.

(a) Conflicts. All orders issued under the contract are subject to the terms and conditions of the contract. The contract will prevail in the event of a conflict with any order.

(b) Completed Work. The Contractor, upon receipt of an order, shall complete the work within the intervals prescribed in Section F of the contract. The Contractor, upon completion of the work, shall verbally notify the ordering office of the actual date the work was completed. A written completion notice shall be provided to the ordering agency within five working days of completion of work. Both notices shall specify order number and the final date of completion.

(c) Minimum Order Limitation. When the Government requires supplies or services covered by this contract in an amount of less than \$50,00, the Government is not obligated to purchase, nor is the contractor obligated to furnish, those supplies or services under the contract.

13. Billing Time Frame. Billings will be rendered on a calendar month basis by the Contractor, directly to the ordering agency. In accordance with Title 31, US Code, Sec. 3324, which prohibits paying public money in advance of the services rendered, all invoices will be rendered in arrears of service.

(a) Billing Description. The Contractor will render invoices for monthly charges at the end of the monthly billing period in which the charges occur. An original and one copy of the invoice (which will include supporting documentation) will be forwarded to the agency office that has been designated in the purchase order. All monthly billing will identify the agency's order number and the type and location of equipment and services. The invoice will provide subtotals by order number and items, plus a grand total. Past due charges and/or credits from previous invoices will be separately identified.

Chapter 2 - EQUIPMENT / INSTALLATION PROVISIONS

- 1. Equipment and Installation Provisions.** This chapter outlines the requirements that the Contractor must meet during the initial installation of a telecommunications system including time frame for delivery of items and services.
- 2. Shipping and Packing.** All initial shipping, packing, and marking of items will be made at the Contractor's expense to the Government's site, as specified in each purchase order. The Contractor will pay all rigging and drayage costs. The Contractor will supervise the packing, unpacking, and initial placement of all items.
 - a. Reinstallation Within the Same Building.** It is the Contractor's responsibility to pack, unpack, and mark items covered by the contract that are to be reinstalled within the same building or campus area. The Contractor will not bill this service as a separate item.
 - b. Reinstallation in a Different Building.** If an agency orders reinstallation in a different building or campus area (of items initially shipped and installed under the POTS contract), shipping, packing, and marking will be the Government's responsibility. Agencies may use Government transportation, commercial carrier, or provide the Contractor with an authorization to ship by commercial carrier on a prepaid basis, in which case the Government will be invoiced for transportation, rigging and drayage costs. All items covered in the POTS contract may be reinstalled anywhere in the contract area at the given installation and/or de-installation prices.
- 3. Equipment Delivery Intervals.** Delivery of equipment purchased under the POTS contract shall be based upon mutual agreement between the Contractor and the ordering agency. Unless requested by the ordering agency, the time of delivery shall not exceed the number of days after receipt of order (ARO), as set forth below.

EQUIPMENT	QUANTITIES	WORKING DAYS AFTER RECEIPT OF ORDER
Telephones	(up to 5)	5
	(6 to 25)	10
	(26 to 50)	13
	(51 to 75)	16
	(76 or more)	20
Electronic Key Common Equipment		13
Miscellaneous Equipment		10
PBX's		35
Fiber Optic Cable		10
Voice Mail Systems		25

4. Service Intervals. The Contractor, upon receipt of an order for service (move, installation, de-installation, and/or rearrangement) shall complete the work according to the schedule below. Service intervals shall not exceed the number of days set forth below.

EQUIPMENT	QUANTITIES	WORKING DAYS AFTER RECEIPT OF ORDER OR DELIVERY OF EQUIPMENT
Telephones	(up to 5)	5
	(6 to 25)	10
	(26 to 50)	20
	(51 or more)	25
Electronic Key Common Equipment	(10 or less stations)	10
	(more than 10)	20
Miscellaneous Equipment	(10 or less)	10
	(11 or more)	20
PBX's		35
Fiber Optic Cable		10
Voice Mail Systems		25

5. Equipment and Installation Standards. The ordering agency will take steps necessary to ensure the Contractor complies with the standards outlined in RFP Section C. This is available from the contractor upon request.

6. Site Preparation. Site preparation necessary for proper equipment operation shall be performed by the Contractor or, at the option of the Government, performed by another Contractor, or by the Government itself. Site preparation requirements for commercial “dedicated” power, backup power, grounding, conduits, or environment shall be provided by the Contractor to the ordering agency and must be in accordance with all applicable Government specifications. The Contractor shall provide a firm-fixed price cost proposal to accompany the site preparation specifications, indicating the Contractor’s price for accomplishing the job. The Government shall have the option of accepting or negotiating the Contractor’s offer or performing the site preparation using another Contractor or Government resources. Any alterations or modifications in site preparation, which are attributed to incomplete or erroneous specifications provided by the Contractor, shall be made at the expense of the Contractor.

7. Site Preparation Specification/Regulations. If the Government determines that the Contractor will perform site preparation, the Contractor shall obtain the site preparation specifications from the ordering agency. All work shall be performed in accordance with Federal, State, and Local Government specifications/regulations.

8. Basic Agency Provisioning. Each agency may require the Contractor to coordinate equipment installation with dial tone installation without cost to the Government. To establish agency provisioning between the Contractor and the Local Exchange or PBX Contractor, Agencies must furnish a “letter of agency” to the Contractor. A sample “letter of agency” is provided in Appendix 6.

a. Dial Tone Continuity. When coordination is ordered, the Contractor will be responsible for locating and identifying telephone company installed lines and performing the necessary connection to the equipment. The Contractor will coordinate with the telephone company to assure dial tone continuity. The Contractor will not turn over equipment operation to the Government until both equipment and line function as a unit.

b. Identifying Line Service Requirements. If coordination is ordered, the ordering agency will furnish as much information as possible to assist the Contractor, including the line order number issued to the telephone company, the address and location where the line is to be installed, exact services and facilities ordered, requested installation date, and the name of an agency contact. The ordering agency will obtain line order numbers from GSA for those lines ordered from GSA.

c. Agencies are Ultimately Responsible for Problems. If the Contractor encounters any problems with the telephone company (such as changed line installation dates or malfunctioning services) the Contractor will immediately notify the ordering agency. The agency will then be responsible for notifying GSA of corrective actions required of the telephone company or PBX Contractor.

9. Equipment Marking. All equipment purchased from the Contractor will be identified with a non-reusable sticker imprinted with the Contractor's name and a local or toll-free repair number. The installation date will be noted with a permanent marker pen on the same sticker. In addition to identifying the initial installation date, the sticker will also indicate the date that the one-year free repair warranty begins. The Contractor will attach the sticker at the time of initial installation or delivery on the base of the equipment in such a way as to assure its survivability and visibility.

10. De-installation. De-installation includes all labor, tools, and incidental parts or materials necessary to accomplish equipment removal (including cabling that was installed by the Contractor, if requested by the Government).

Chapter 3 - REPAIR / MAINTENANCE

1. Repair / Maintenance. Chapter 3 outlines repair and maintenance responsibilities. Appendix 7 is a working document that outlines procedures to follow when reporting telephone problems. The user agency shall provide maintenance for multi-button sets, complete 1A2, EKS and PBX systems, and any equipment other than that equipment which is inexpensive enough to be replaced rather than maintained.

a. One-Year Warranty. Repair services are automatically included in a one-year warranty. After the warranty expires, each agency has the option of purchasing maintenance services from the appropriate table (Appendix 3).

b. Spare Telephones. On single line systems it may be cost effective to purchase an extra telephone as a "spare" to avoid repair costs, while on multi-line systems maintenance is ordinarily an essential expense to safeguard against potential system failure (and/or expensive repair bills). The user agency should be aware that, depending on cost, it may sometimes be more cost effective to buy a new single line set than to order maintenance on one set.

2. Repair Reporting Telephone Number. The telephone number for the Contractor is:

1-800-766-POTS

3. Trouble Call Reporting, Routine or Emergency. The agency will determine whether a repair call is routine or emergency. There will be no additional charges for repair work performed at any time, whether routine or emergency, if the equipment is covered under maintenance or the one-year warranty. If the Contractor determines that a problem is due to the Local Exchange (or non-POTS contract) circuit, the Contractor will immediately inform the agency. The agency will assume responsibility for corrective action by reporting the trouble to GSA. The Contractor is required to correct or re-perform any service or replace any defective parts, at no cost to the Government, within the time frame specified below.

a. Routine Call - The Contractor will arrive on location within ten (10) hours after receipt of the trouble call and restore service within an additional twenty-four (24) hours.

b. Emergency Call - The Contractor will arrive on location within four (4) hours after receipt of the trouble call and restore service within an additional twelve (12) hours.

4. What Repair Includes. Maintenance and repair services include fault identification and correction by repair or replacement. This includes all labor, tools, materials, and major or minor components necessary to restore service. Repairs or parts required due to abuse, negligence, carelessness, fire, or other

causes held excusable under the Defaults Clause are not included. The Contractor is not responsible for the replacement of stolen or missing equipment or parts, provided they are not guilty of negligence that contributed to the theft or removal.

5. Diagnosing a Repair Problem. Each agency will attempt to determine if a problem is in the line or equipment (see Appendix 7). If the problem appears to be in the line, the agency will notify the telephone company or PBX Contractor to correct the problem. If the problem cannot be determined, the agency will notify the Contractor. If the Contractor then determines that the problem is related to the telephone company or PBX Contractor line, the Contractor will notify the agency and the agency will report the problem to the responsible vendor. If the problem ultimately turns out to be in the Contractor's equipment, any cost related to the telephone company or PBX Contractor's examination of the problem will be the responsibility of the Contractor. The agency can then make proper arrangements for credit from the POTS Contractor.

6. Replacement Parts. The Contractor guarantees that replacement parts for the items offered in this contract will be available for the life of the contract. At the termination of the contract, if parts are not available, the Contractor will, if requested by the Government, furnish data to enable the Government to obtain such parts from another qualified source.

Replacement Parts Standards. All replacement parts will be original manufacturer's parts or functionally equivalent which are new or equal in performance to new parts.

7. Maintenance Service. After the one-year warranty expires, each agency has the option of purchasing maintenance services from the appropriate table (shown in Appendix 3). Maintenance covers all telephones and ancillary equipment. Agencies will submit annual purchase orders to the Contractor for maintenance with monthly amendments as necessary to increase or decrease items. However, the Contractor will honor orders for maintenance for a period of less than one year. Also, the ordering agency may terminate maintenance orders without cost to the Government on any item after 30 days from the date of a written notice to the Contractor.

a. Maintenance Must Be Ordered Separately. Maintenance must be ordered, on a purchase order, separately from all other items. Maintenance may be ordered in bulk or by specification. When ordering maintenance, agencies may list the items in bulk quantities if all items of one type are to be maintained at one location (i.e., all six-button sets at one location). Otherwise, agencies must list the item number, phone number, and room number of each item to be maintained. The Contractor shall place data stickers on items to be maintained.

b. Description / Maintenance. Maintenance will include fault identification, location identification, correction, or replacement including all labor, tools, materials, and major and minor components necessary to restore equipment to service. Costs for maintenance will be on a flat-fee basis and no additional charges will be incurred. Repairs and/or parts necessitated by fire, abuse, theft, negligence, carelessness, or other causes held excusable under the Default Clause are not included.

c. Items Must be in Good Operating Condition. Maintenance may only be ordered on items that are in good operating condition. Each item must be able to perform (or be capable of performing) all intended functions and there may be no missing or broken parts. Equipment that requires cleaning and minor repair(s) not requiring parts or adjustments will be considered to be in good operating condition.

d. Review of Items Ordered for Maintenance. Within five (5) working days after receiving an agency's written maintenance order, the Contractor has the option of arranging with the agency to establish a completion date for examining the items ordered for maintenance. The completion date will be no later than 15 working days after the Contractor receives a maintenance order, except when the Government agrees to a later date. No charge will be made for maintenance of items erroneously listed on the delivery or for items that cannot be located during examination.

e. Accepting Items for Maintenance. If the Contractor elects to examine the items, the Contractor must notify the ordering agency, in writing, of any items that are not acceptable for maintenance. The Contractor will state, in writing, the reason(s) for the rejection. Failure to notify the ordering agency within seven (7) working days after the agreed examination completion date will constitute acceptance by the Contractor of all items listed on the purchase order. The Contractor shall, after examination and acceptance, place a permanent date sticker on each item.

f. Acceptance for Maintenance During Service Calls. When the Contractor responds to a service call before accepting an item for maintenance, the Contractor has the option of accepting or rejecting the items at that time. If an item is accepted, service will be performed.

8. Repair Responsibility. The Contractor bears no repair responsibility for any item for which maintenance service has not been ordered. Any disagreement between the Contractor and the agency concerning what constitutes an item to be covered under the maintenance agreement will be deemed to be a matter concerning a question of fact and subject to resolution under the Disputes Clause within the contract.

9. Terminating Maintenance. Upon written notice and explanation to the ordering agency, the Contractor may terminate maintenance service on any item under contract that is worked on by other than authorized repair personnel. Also, the ordering agency may terminate maintenance orders without cost to the Government on any item after 30 days from the date of a written notice to the Contractor.

10. Maintenance on Non-POTS Contract Items. If an agency owns items which were not ordered from this or previous POTS contracts and desires to have the Contractor maintain and service them, the following procedures will apply:

a. The Government provides a written request to the Contractor to maintain and/or service the specified item of equipment.

b. The Contractor has the option to inspect all offered equipment and may opt not to accept it for maintenance and/or service if it is not in good operating condition. In this instance, the Contractor shall provide a statement indicating what is required to make the equipment acceptable and the price to make it acceptable. The Government shall then decide if it is monetarily beneficial to repair the equipment.

c. If the Contractor decides to accept the equipment for maintenance and/or service, the Government may issue the appropriate order. The pricing of the order shall be in accordance with the appropriate price table in Section B of the POTS contract.

Chapter 4 - TESTING / INSPECTION / DEFAULT

1. Responsibilities. Chapter 4 covers the responsibilities of the Contractor to ensure that equipment is properly tested and installed. It also covers agency responsibilities and procedures for testing, accepting, or rejecting items or services supplied by the Contractor. It is incumbent upon the ordering agency to ensure the equipment or service ordered is received, installed correctly, and functioning correctly prior to accepting the equipment or service.

2. Contractor Testing and Inspection. The Contractor is responsible for performing all inspections and tests necessary to substantiate that the items, supplies, or services furnished under each purchase order conform to contract requirements (including any applicable technical requirements for specified manufacturer's parts). This will be accomplished on each purchase order before informing the ordering agency that the job order has been completed. Government acceptance, testing, and inspection will not begin until after the Contractor has notified the agency of job completion.

3. What Contractor Testing Will Include. The testing accomplished by the Contractor before notifying the agency that the job order has been completed will include:

a. Placing Test Calls. Any instruments installed separately from common equipment will be tested by placing and receiving one call on each line and all intercom paths. Any instruments associated with (and installed with) common equipment will be included in the performance test of the key system. All instruments will be tested as prescribed by the manufacturer.

b. Other Testing. Miscellaneous equipment ordered under the contract will be tested as prescribed by the manufacturer. All other equipment, wiring, and devices will be tested in accordance with the highest commercial standards and with all the requirements set forth or referenced elsewhere in this contract.

4. Defects. If the Contractor becomes aware at any time before acceptance by the agency (whether before or after tender to the agency) that a defect exists in any equipment, supplies, or services, the Contractor will: (1) promptly correct the defect and (2) promptly notify the ordering agency, in writing, of the defect and that it has been corrected.

5. Government Testing. Before the ordering agency officially accepts Contractor provided equipment or services, the agency has the right to perform testing and inspection. Government testing and inspection will not unduly delay any other Contractor work being performed, nor will it create a defect in Contractor provided equipment, supplies, or services. Equipment, supplies, and

services provided by the Contractor on each purchase order will be generally tested and inspected by the agency to:

(a) ensure such equipment, supplies, or services have been provided as ordered; that installation is accomplished in a neat and orderly fashion; that equipment appears to be in good working condition; and that the equipment, supplies, or services are satisfactorily performing as ordered and

(b) to ensure that any defect or failure detected during Government testing and inspection is reported to the Contractor within three (3) working days.

6. Acceptance by the Agency. The word acceptance, as used in this contract, means the act of an authorized representative of the agency approving and assuming ownership of equipment, supplies, and services.

a. 30-Day Performance Test. All equipment, supplies, or services furnished by the Contractor will satisfactorily complete a performance test within 30 calendar days immediately following installation or cutover. Successful completion of the performance test will be deemed to have occurred only after an item has functionally operated (without a major failure) for 15 consecutive days within the 30 days immediately following installation or cutover. Major failure is defined as the operational failure of a single instrument for 10 hours or more, or failure of five (5) instruments or more, regardless of duration. If the equipment fails to meet this standard of performance the agency may request a replacement, initiate termination of the order pursuant to the Default Clause, or grant an extension of the period allowed for successful completion of the acceptance test.

b. Automatic Acceptance. The absence of an official written notice from the ordering agency within 15 days after the 30 day period stating that acceptance testing has failed, will mean that acceptance has occurred. However, the agency will still execute its rights under the warranty clause.

7. Testing and Inspection After Government Acceptance. Each agency has the right to inspect and test all equipment, supplies, or services ordered under the contract at all times and places throughout the term of the contract. Government testing and inspection will not unduly delay any Contractor work being performed nor will it create a defect in equipment, supplies, or services covered by this contract. Any Government testing that results in malfunctions, after the warranty period expires, will be the Government's responsibility.

8. Correcting Defects. The Contractor has the responsibility for correcting defects or failures detected by Government testing, use, or inspection of Contractor provided equipment, supplies, or services.

a. Definition of Defect. The term “defect,” as used in this paragraph, means any condition or characteristic in any equipment, supplies, or services furnished by the Contractor under the contract that is not in compliance with the requirements of the contract.

b. Standards. All equipment, supplies, or services furnished under this contract will conform to contract requirement including any applicable technical requirements for specified manufacturer’s parts, equipment, and systems.

c. Correcting Defects under Warranty or Maintenance. The Contractor will not be responsible for the correction of any defects in Government property which are not covered by a maintenance order unless the Contractor performs, or is obligated to perform, any modification or other work on such property, in which case the Contractor will be responsible for correcting defects that result from the work performed.

9. Correcting Defects Before Government Acceptance. Any defects detected by the agency acceptance of Contractor provided equipment, supplies, or services will be reported to the Contractor within three (3) working days. The Contractor will take whatever action is necessary to assure that the defect is corrected. Any supplies or parts corrected, or furnished in replacement, and any services redone will also be subject to the conditions of the contract to the same extent as supplies or services initially accepted. The Contractor will be liable for the reasonable costs of disassembly or reassembly of larger items when it is necessary to remove the equipment to be inspected or returned for correction or replacement. *The recognition of a defect by the agency before acceptance might affect the actual acceptance by the agency.*

10. Correcting Defects During the Warranty Period. The warranty period begins on the day of delivery or acceptance by the agency of contract provided equipment, supplies, or services. This warranty is free of charge. While the one-year warranty is in effect the agency should not ask for a concurrent maintenance agreement.

a. Reporting of Defects During the Warranty Period. Any defect or failure of equipment, supplies, or services detected by the agency during the warranty period will be reported to the Contractor within three (3) working days. The Contractor will take whatever action is necessary to assure that the defect or failure is corrected. Any supplies or parts corrected, or furnished in any services re-performed will also be subject to the conditions of the contract to the same extent as supplies or services initially accepted. The warranty, with respect to these replaced supplies, parts, or services, will be equal to the one-year period and will run from the new date of acceptance. The Contractor will be liable for the reasonable costs of disassembly or reassembly of larger items when it is

necessary to remove the equipment to be inspected or returned for correction or replacement.

11. Correcting Failures Following the Warranty Period. Any equipment, supply, or service failure detected after any warranty period has expired will be corrected if that equipment, supply, or service is covered by a maintenance agreement.

12. Rights and Remedies Available to the Agency. The rights and remedies available to the agency will be exercised at the discretion of the ordering agency, within authorized limits of the Contracting Officer, when any of the procedures for defect and failure correction described in this document have resulted in the Contractor not correcting such defects or failures. Any and all uncorrected defects or failures will constitute grounds for invoking the provisions of the Default Clause.

13. Uncorrected Defects Detected Before Government Acceptance. If the ordering agency, or Contracting Officer, determines that an uncorrected defect or failure exists during the pre-acceptance period which has caused the Contractor to fail the 15 consecutive day requirement, the ordering agency or Contracting Officer may invoke any one of the following rights or remedies by written notification to the Contractor within seven (7) days following failure of the fifteen consecutive day procedure. The ordering agency of the Contracting Officer may:

(a) grant the Contractor a time extension for complying with the 15 consecutive day requirement.

(b) require the Contractor to completely re-perform the job as defined by the contract and individual purchase order. This will be done at no additional cost to the agency. This assumes an extension for the 15 consecutive day requirement, or

(c) cancel the order in accordance with the Default Clause and have the Contractor completely remove the equipment, supplies, or services installed on that order. This will be done at no cost to the agency.

14. Failure to Correct the Defect. If the Contractor fails or refuses to perform any of the rights or remedies listed above as requested by the Government, then the agency will have the right to secure detailed recommendations from sources other than the Contractor for corrective action and either:

(a) have someone other than the Contractor correct the equipment, supplies, or services and bill the Contractor for all incurred costs, or

(b) replace the equipment, supplies, or services, and if the Contractor fails to furnish timely disposition instructions, the Contracting Officer may dispose

of the nonconforming supplies against the Contractor's account in a reasonable manner. The Contractor will be liable for transportation charges up to an amount equal to the cost of transportation by the usual commercial method of shipment from the place of delivery specified in the individual delivery order (regardless of the Free On Board (F.O.B.) point or the point of acceptance) to the Contractor's plant and returns to the place of delivery specified in the individual delivery order. The Contractor will also bear the responsibility for the supplies while in transit. The agency will have the right, by separate procurement or otherwise, to replace equipment or correct services and to charge the Contractor any costs incurred by the agency that are directly related to the replacement or re-performance.

The agency will have the right to make an equitable adjustment in the contract or delivery order price.

The agency will have the right to charge the Contractor for the costs incurred by the agency.

15. Uncorrected Defects Detected During Warranty. If the ordering agency or Contracting Officer determines that an uncorrected defect or failure exists during the warranty period, the ordering agency or Contracting Officer may invoke its rights and remedies by notifying the Contractor of the uncorrected defect or failure and requesting a complete proposal from the Contractor describing how the Contractor proposes to correct the defect or failure. The Contractor must respond, in writing, with this information within 10 calendar days. If the Contractor independently discovers a defect in accepted supplies or services, the Contractor will submit a recommendation for corrective actions together with supporting information in sufficient detail for the Contracting Officer or the ordering agency to determine what corrective action, if any, will be taken. Within 30 days after receipt of recommendation for corrective action and adequate supporting information, the Contracting Officer or the ordering agency, using sole discretion, will give the Contractor written notice not to correct any defect, or to correct or partially correct any defect within a reasonable time at the location specified in the notice. This will specify a period of time in which the Contractor must remedy the failure specified or the notice will state that the agency will have a right to require the Contractor to correct or re-perform any defective, nonconforming, or non-complying supplies or services within seven (7) calendar days after receipt of the notice. If the agency requires replacement of any equipment or re-performance of any service furnished under this contract, it must be provided at no cost to the agency. Any equipment replaced or services re-performed by the Contractor under this clause will be subject to all provisions of this clause to the same extent as the equipment or services initially furnished.

If the Contractor fails or refuses to perform in accordance with the above, as requested by the agency, or the agency does not accept the corrective proposal of the Contractor, the following rights and remedies may be invoked by the agency against the Contractor's account:

(a) the agency will have the right to obtain detailed recommendations from sources other than the Contractor for corrective action and either correct the equipment, supplies, or services or replace the equipment, supplies, or services, and if the Contractor fails to furnish timely disposition instructions, the Contracting Officer may dispose of the nonconforming supplies against the Contractor's account in a reasonable manner. The Contractor will be liable for transportation charges up to an amount equal to the cost of transportation by the usual commercial method of shipment from the place of delivery specified in the individual deliver order (regardless of the F.O.B. point or the point of acceptance) to the Contractor's plant. The Contractor will also bear the responsibility for the supplies while in transit.

(b) The agency will have the right, by separate procurement or otherwise, to replace equipment or correct services and to charge to the Contractor any costs incurred by the agency that are directly related to the replacement or re-performance.

(c) The agency will have the right to make an equitable adjustment in the contract or delivery order price.

(d) The agency will have the right to charge the Contractor for all costs incurred by the agency.

16. Uncorrected Failures Detected Following Warranty. Only those equipment items, supplies, or services included in or provided in connection with a maintenance agreement are covered by this paragraph. The Government has no rights or remedies for any equipment, supplies, or services not included in or provided in connection with a maintenance agreement.

a. The Contractor is expected to correct any detected failures as described above.

b. If the ordering agency or Contracting Officer determines that an uncorrected failure exists during this period, the ordering agency or Contracting Officer may invoke its rights and remedies by written notifications to effect:

(1) Correction by obtaining corrective action from sources other than the Contractor. This may be invoked by the ordering agency or Contracting Officer by written notification to the Contractor when a failure has not been corrected within 15 calendar days. Any costs incurred by the Government for obtaining this kind of corrective action will be billed to the Contractor.

Appendix 1 - PLANNING WHAT TO ORDER

1. Planning. You are responsible for the development and management of your own telephone system. The quality and cost effectiveness of that system will partly depend on how you plan your system. Planning should include conducting an inventory, comparing each system, comparing system features, and evaluating the requirements of your agency and each individual employee. Depending on the complexity of your system requirements, you may need to develop floor plans, coordinate with GSA telecommunications, local exchange companies, and your Contractor.

2. Where to Start. Start by updating your telephone equipment inventory. Review each feature associated with each telephone. Your inventory should include:

- a. the total number of each type of telephone (i.e., speakerphone, wall mounted phone, six button phone),
- b. the total number of lines and line configurations, and
- c. any additional items required (such as call directors).

3. Deciding on a System. There are three basic types of systems: single line systems, multi-line electronic key systems and PBX's. To evaluate whether or not a particular system (or combination of systems) is cost effective for your agency you should consider employee needs, the costs of each line (and line features), wiring costs, installation costs, and any other potential costs. Following is a general description of the four basic types of systems offered and some of the hidden costs and other factors to consider.

a. Single Line Systems. Installations, changes, and disconnects are less costly than multi-line telephones. In some cases, users may simply unplug the existing telephones and plug in the purchased ones. Call forwarding, call pickup, and other features may be leased as Centrex services. Centrex features are ordered via Standard Form 145 through GSA. Single line systems are fast and easy to rearrange. Annual maintenance (repair) service is usually unnecessary on single line systems. It's less expensive to simply purchase an extra telephone as a "spare" to avoid repair costs while, on a multi-line system, maintenance is always an essential expense. Line costs vary between cities in effectiveness of using a single line system over a multi-line system.

b. Multi-Line Electronic Key Systems. New multi-button electronic key systems are wired to common equipment (usually in a wire closet on the same floor). Standard and optional features such as call forwarding, speed dialing, hands-free intercom, and speakerphones are built in. After the warranty expires, maintenance service should be purchased annually to safeguard against

potential system failures. In addition to purchasing the telephones, you should purchase compatible common equipment (Table C of the POTS contract), plus installation service, and other applicable services. To reduce the possibility of electrical interference, you may need to purchase new "three-pair" wiring (or have the Contractor re-wire your existing "25-pair" wiring by "grounding" 22 of the 25 pair). Dedicated electrical circuits should be provided to reduce the possibility of power surge damage to the equipment.

c. Digital PBX's. Price Table I of the POTS contract is used to provide prices for new digital PBX common equipment. Systems shall be available in the configurations shown in the "Configurations" column of the price table. PBX's shall include all components, software, parts and materials necessary to make a complete operating digital PBX telephone system, less instruments and instrument cabling. Systems will be provided with any cabinet arrangement suited to the number of trunks and station lines required. A cable distribution frame and a network interface will be provided with each system, thus, enabling a means of cross connecting between the systems, the tariffed telephone company facilities, and the building distribution facilities. All PBX's shall be provided with Central Office trunk cards to the PBX's ordered capacity and priced accordingly. However, the Government reserves the right to down-size or up-size any configuration by adding or deducting the number of station and/or trunk cards or other items by adding or subtracting the Contractor prices indicated on price Table J of the POTS contract.

4. Comparing the Systems. The Contractor can help you compare features and cost benefits of the various systems. The Contractor shall provide design assistance for common equipment and PBX's procured using this contract, as well as equipment layout and assistance in ordering supplies and services available under this contract as requested by an ordering agency. The Contractor shall ensure that features offered within the purchase price of service from the LEC (Centrex, call forwarding, call pickup, call transfer, speed calling, etc.) are not duplicated in designs the Contractor provides. The Contractor provided design assistance for key system common equipment will be the same, to the extent possible, as that described for PBX's. Assistance shall also be provided to ensure the proper installation and coordination of dial tone between the LEC or PBX vendor and/or the Contractor. When assistance is requested, it shall include, but not be limited to: identifying the wire closet, interface point, and jack and pin numbers, insuring the proper coordination of the supplies and services, and estimating costs associated with a specific job which may result in an order being issued. Any request for assistance involving PBX's or EKS common equipment, wiring and cabling, or telephones (other than those which require only disconnect and connect to an active RJ11) requires the Contractor to make a site visit to assess agency equipment needs and other requirements. Upon request of an agency request for assistance, the Contractor shall, within 24 continuous hours, schedule a site visit to be held within seven working days of the initial agency request.

The Contractor should submit a system proposal within 14 days of the site visit for systems with 25 telephones or less and within 30 days of the site visit for systems with 26 or more telephones. The Contractor's representative for the site visit shall be at least equal to the position of a Customer Service Representative (CSR). The Contractor is required to provide telephone station design consultation free of charge. For large orders (over 25 phones) the Contractor is required to visit your premises. The Contractor will also review the wiring in your building to help you evaluate potential wiring and installation costs. For more information, call your Contractor at 1-800-766-POTS. You are responsible for insuring the adequacy of equipment ordered and the space available for installation. More details are available in Section C of your POTS contract. Each agency is responsible for providing any forms required. Each agency is also responsible for analyzing the costs/benefits and appropriateness of all Contractor recommendations and for making the ultimate purchasing decisions.

Appendix 2 - WIRING

1. **Wiring.** To avoid installation delays (and avoid paying unnecessary wiring charges) you must be aware of the location and adequacy of your telephone wiring and cabling. Requirements and regulations vary greatly between cities and states. As mentioned in Appendix 1, there are important differences between the type of wiring used in single line systems and key telephone systems.
2. **GSA Switching Systems.** Most Federal agencies use GSA switching systems for FTS and local “dial tone” service. Appendix 4 contains examples of how to move lines and order dial tones. In most cases, wiring responsibility is related to the type of telephone systems as outlined below.
 - a. **Single-Line Telephone Wiring.** In most cases, the local exchange owns the wiring up to the modular (or RJ11) jack into which you plug your telephone. You may purchase single-line telephones from Table A in Appendix 3 and plug them in yourself. Or, if cost effective, you may opt to buy new wiring and installation services from the Contractor.
 - b. **Multi-Line (1A2 Type) Key System Wiring.** If you have a 1A2 key system your agency is also responsible for the wiring from each floor’s wire-closet to each telephone. To add additional telephones, you will need to order any required wiring and installation service from the Contractor.

When replacing existing 1A2 Key Systems with electronic systems, call your contractor. The Contractor should be able to reuse the existing wiring if your existing system is already wired for multi-line systems. You will be required to order “cross-connects” from Table G.
 - c. **Electronic Key Systems.** Older 1A2 key systems use 25-pair wiring. Electronic key systems only need three-pair wiring. Any existing 25-pair wiring may be made reusable by the Contractor grounding 22 of 25 pairs. The remaining three-pair can be crossed-connected. This, in effect, allows the 25-pair wire to serve as the three-pair and should be kept in mind as a means of reducing wiring costs and reducing disruptions to the attendant with removal of wiring.
 - d. **Private Branch Exchanges (PBX’s).** Any agency that operates its own (GSA approved) PBX is responsible for related wiring and cabling (also called riser cable or vertical wire), which may extend between floors.

3. Line Service. In most cases, dial tone (telephone lines), line loops, and dial tone related services such as system and station features (call forwarding, call pickup, speed dialing, etc.) are supplied (through GSA) from the local exchange. System and station features that duplicate features available in the equipment should not be ordered.

Appendix 3 - PRICE TABLES

1. Price Tables. Each Table listed below includes the price for the items or services indicated. For more details about the features and benefits of specific items in these tables, call your Contractor.

TABLE / PAGE #

TABLE A (Page 26):	New Telephones and Miscellaneous Equipment
TABLE C (Page 36):	New Analog and Digital Electronic Key Telephone Systems (EKTS and DKTS) Common Equipment
TABLE D (Page 40):	New 1A2 Key Telephone System Enhancements
TABLE E (Page 44):	New Electronic Telephone System Enhancements
TABLE F (Page 50):	Purchase of New Cable (per foot basis)
TABLE G (Page 54):	Cable Cross Connect
TABLE H (Page 56):	Flat Rate Wiring
TABLE I (Page 61):	New Digital PBX Common Equipment
TABLE J (Page 63):	Digital PBX Additional Equipment and Features
TABLE K (Page 67):	Fiber Optic Cable (per foot basis) and Related Items
TABLE L (Page 74):	Voice Mail System(s)

2. GSA Surcharge Collection. The General Services Administration has authorized Black Box Network Services, Inc. – Government Solutions to collect the 4.0% GSA surcharge for FY 2002 sales against the Southeast Sunbelt Region POTS contract for the states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, and Tennessee. The surcharge will appear as a line item on invoices from Black Box Network Services, Inc. – Government Solutions and will be collected by Black Box Network Services, Inc. – Government Solutions on GSA's behalf.

3. Price Table Details.

Price Table A.

New Telephone Instruments and Miscellaneous Equipment. This table specifies the prices for the purchase of New Telephones and Miscellaneous Equipment. It also specifies the prices to install, de-install, move, and maintain telephones, as well as miscellaneous equipment provided by the Contractor or Government-owned like equipment.

TABLE A -- NEW TELEPHONE INSTRUMENTS AND MISCELLANEOUS EQUIPMENT

#1	#2	#3	#4	#5	#6	#7
ITEM NO.	ITEM	MANUFACTURER/ MANUFACTURER'S PART NUMBER	PURCHASE NEW UNIT PRICE	INSTALL OR MOVE UNIT PRICE	DEINSTALL UNIT PRICE	MONTHLY MAINTENANCE UNIT PRICE
1.	SET, SINGLE LINE DESK, TOUCHTONE	ITT/CORTELCO 2500XX-VBA-20M-H	\$32.03	\$8.89	\$3.56	\$1.71
2.	SET, SINGLE LINE WALL, TOUCHTONE	ITT/CORTELCO 2554XX-VBA-20M-H	\$32.03	\$8.89	\$3.56	\$1.71
3.	SET, SINGLE LINE W/LCD DISPLAY 2 WAY SPEAKERPHONE AND PROGRAMMABLE AUTODIALER	ATT957 SINGLE LINE	\$49.41	\$8.89	\$3.56	\$2.01 x
4.	SET, ELEVATOR, FLUSH WITH ENCLOSURE BOX	ALLEN-TEL GB-523	\$285.98	\$8.89	\$3.56	\$2.29
5.	SET, 1A2 KEY W/6 BUTTONS - DESK, TOUCHTONE	ITT 2564	\$60.63	\$10.66	\$3.56	\$2.29
6.	SET, 1A2 KEY W/6 BUTTONS WALL, TOUCHTONE	ITT 2851	\$103.53	\$10.66	\$3.56	\$2.29
7.	SET, 1A2 KEY W/10 BUTTONS DESK, TOUCHTONE	ITT 2830	\$90.22	\$21.34	\$5.33	\$2.29
8.	SET, 1A2 KEY W/10 BUTTONS WALL, TOUCHTONE	ITT 2854	\$94.74	\$21.34	\$5.33	\$2.29
9.	SET, 1A2 KEY W/10 BUTTONS AND 2-WAY SPEAKERPHONE	ITT 2842	\$204.42	\$26.68	\$5.33	\$2.29
10.	SET, 1A2 KEY W/20 BUTTONS AND 2-WAY SPEAKERPHONE	ITT 2843	\$298.71	\$42.66	\$7.11	\$3.44
11.	SET, 1A2 KEY W/20 BUTTONS - DESK, TOUCHTONE	ITT 2831	\$180.44	\$42.66	\$7.11	\$3.44
12.	RESERVED					
13.	RESERVED					
14.	RESERVED					
15.	RESERVED					
16.	RESERVED					
17.	RESERVED					
18.	RESERVED					
19.	EKS, SINGLE LINE SET DIGITAL	COMDIAL IMPACT 8101 N	\$63.32	\$26.68	\$5.33	\$2.29
20.	EKS, 5 BUTTON SET DIGITAL	COMDIAL IMPACT 8012S	\$143.80	\$30.21	\$6.04	\$2.35
21.	EKS, 10 BUTTON SET DIGITAL	COMDIAL IMPACT 8012S	\$143.80	\$30.21	\$6.04	\$2.35
22.	EKS, 20 BUTTON SET DIGITAL	COMDIAL IMPACT 8024S	\$204.85	\$30.21	\$6.04	\$2.35

TABLE A -- NEW TELEPHONE INSTRUMENTS AND MISCELLANEOUS EQUIPMENT

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ITEM NO.	ITEM	MANUFACTURER/ MANUFACTURER'S PART NUMBER	PURCHASE NEW UNIT PRICE	INSTALL OR MOVE UNIT PRICE	DEINSTALL UNIT PRICE	MONTHLY MAINTENANCE UNIT PRICE
23.	EKS, SINGLE LINE SET WITH 2 WAY SPEAKERPHONE DIGITAL	COMDIAL IMPACT 8012S	\$143.80	\$30.21	\$6.04	\$2.35
24.	EKS, 5 BUTTON SET WITH 2 WAY SPEAKERPHONE DIGITAL	COMDIAL IMPACT 8012S	\$143.80	\$30.21	\$6.04	\$2.35
25.	EKS, 10 BUTTON SET WITH 2 WAY SPEAKERPHONE DIGITAL	COMDIAL IMPACT 8012S	\$143.80	\$30.21	\$6.04	\$2.35
26.	PROP-PBX SINGLE LINE SET WITH 2 WAY SPEAKERPHONE AND DISPLAY	AASTRA POWER TOUCH 480	\$139.00	\$26.68	\$5.33	\$2.29 x
27.	PROP-PBX MULTI-LINE SET WITH 2 WAY SPEAKERPHONE AND DISPLAY	NORTEL 2616	\$357.94	\$26.68	\$5.33	\$2.29 x
28.	RESERVED					x
29.	RESERVED					x
30.	RESERVED					x
31.	RESERVED					x
32.	RESERVED					x
33.	RESERVED					
34.	NETWORK TERMINATION UNIT 1	BLACK BOX IS200A-R2	\$156.32	\$26.68	\$5.33	\$2.29
35.	RESERVED					
36.	RESERVED					
37.	RESERVED					
38.	RESERVED					
39.	ISDN TERMINAL ADAPTER	BLACK BOX IS280A-R2	\$778.62	\$142.23	\$17.79	\$3.15
40.	7' X 19" DISTRIBUTION/RELAY RACK	BLACK BOX RM631A, 7X19"	\$176.00	\$35.55	\$17.79	x

TABLE A -- NEW TELEPHONE INSTRUMENTS AND MISCELLANEOUS EQUIPMENT

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41.	BRaille LABEL (FOR ALL SETS)	GRAYBAR TENN01	\$2.03			
42.	TDD, ACOUSTIC COUPLED, CHARACTER DISPLAY SCREEN	ULTRATEC MINICOM IV	\$242.76	\$8.89	\$3.56	\$5.02
43.	RESERVED					
44.	TDD, DIRECT/ACOUSTIC COUPLED CHARACTER DISPLAY SCREEN, INTEGRAL PRINTER	ULTRATEC MINIPRINT 425	\$425.60	\$8.89	\$3.56	\$8.78
45.	PORTABLE TELECONFERENCE UNIT WITH INTERNAL SPEAKER AND MICROPHONES	POLYCOM SOUNDSTATION	\$563.00	\$8.89	\$3.56	\$3.53
46.	PORTABLE TELECONFERENCE UNIT WITH SPEAKER AND 2 EXTERNAL MICROPHONES	POLYCOM SOUNDSTATION EX	\$821.92	\$8.80	\$3.52	\$3.40
47.	RESERVED					
48.	RESERVED					
49.	ADJUNCT SPEAKERPHONE TO WORK WITH OFFERED EKS	DKTS COMDIAL 8024S	\$204.85	\$26.68	\$8.89	\$2.86
50.	ADJUNCT SPEAKERPHONE TO WORK WITH OFFERED PBX	ATT 957 SINGLE LINE WITH SPEAKERPHONE	\$49.41	\$8.89	\$3.56	\$2.01 x
51.	ANSWERING MACHINE 1 LINE-REMOTE RETRIEVAL	AT&T MODEL 1718	\$51.50	\$8.89	\$3.56	\$2.29 x
52.	ANSWERING MACHINE 2 LINE	AT&T MODEL 1782	\$110.54	\$17.79	\$8.89	\$2.86 x
53.	HANDSET, ALL SETS, WITH VOLUME CONTROL	WALKER W6500M-44	\$35.12	\$8.89	\$3.56	
54.	HANDSET, ALL SETS, PUSH TO TALK	WALKER PTT-500M-**	\$17.60	\$8.89	\$3.56	
55.	HANDSET CORD MODULAR (12FT.)	LYNN L-H4DU12CA	\$1.10	\$8.89	\$3.56	
56.	HANDSET CORD MODULAR (25FT.)	LYNN L-H4DU25CA	\$2.07	\$8.89	\$3.56	
57.	MOUNTING CORD (14FT.) (FOR SINGLE LINE SET)	ADIRONDACK 7200-14	\$0.84	\$8.89	\$3.56	
58.	CONNECTOR CABLE (15FT.) (FOR 10 BUTTON 1A2 SET)	ORTRONICS OR-804025PC15-1GY	\$8.32	\$8.89	\$3.56	
59.	MOUNTING CORD (14FT.) (FOR EKS SET)	ADIRONDACK 8100-14W	\$1.30	\$8.89	\$3.56	
60.	MOUNTING CORD (25FT)	ADIRONDACK	\$1.16	\$8.89	\$3.56	

TABLE A -- NEW TELEPHONE INSTRUMENTS AND MISCELLANEOUS EQUIPMENT

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	(FOR SINGLE LINE SET)	7200-25W				
61.	CONNECTOR CABLE (25FT) (FOR 10 BUTTON 1A2 SET)	ORTRONICS OR-804025PC25-1GY	\$12.13	\$8.89	\$3.56	
62.	MOUNTING CORD (25FT) (FOR EKS SET)	ADIRONDACK 8100-25W	\$1.77	\$8.89	\$3.56	
63.	HEADSET, LIGHTWEIGHT (FOR SINGLE LINE SET)	PLANTRONICS H-51	\$58.06	\$8.89	\$3.56	
64.	HEADSET, LIGHTWEIGHT, 1A2 (FOR MULTI-BUTTON SET)	PLANTRONICS H-51	\$58.06	\$8.89	\$3.56	
65.	HEADSET, LIGHTWEIGHT (FOR EKS SET)	PLANTRONICS H-51	\$58.06	\$8.89	\$3.56	
66.	HEADSET JACK, 1A2 (FOR MULTI-BUTTON SET)	PLANTRONICS M-10	\$91.67	\$8.89	\$3.56	
67.	HEADSET JACK (FOR SINGLE LINE SET)	PLANTRONICS M-10	\$91.67	\$8.89	\$3.56	
68.	HEADSET JACK FOR EKS SET	PLANTRONICS M-10	\$91.67	\$8.89	\$3.56	
69.	BELL TRANSFER KEY	CREST TKM-6	\$9.27	\$8.89	\$3.56	
70.	BELL KEY CUTOFF	CREST TKM-6	\$9.27	\$8.89	\$3.56	
71.	DSS CONSOLE, 50-STATION FOR EKS	COMDIAL IB64	\$222.36	\$26.68	\$8.89	\$2.29 x
72.	DSS CONSOLE, 50-STATION FOR PBX	NTI KLM/DSS (2) M2616 (1)	\$376.24	\$26.68	\$8.89	\$2.86
73.	RJ11C TYPE JACK	ALLEN-TEL AT468-4	\$0.86	\$8.89	\$3.56	
74.	RJ14C TYPE JACK	ALLEN-TEL AT214B4	\$1.35	\$8.89	\$3.56	
75.	RJ14W TYPE JACK	PREMIER PT-630AC-4	\$2.11	\$8.89	\$3.56	
76.	RJ21X TYPE JACK	SIEMON S66B4-25W	\$22.36	\$17.79	\$3.56	
77.	RJ25C TYPE JACK	ALLEN-TEL AT468-6	\$0.93	\$8.89	\$3.56	
78.	RJ26X TYPE JACK	ALLEN-TEL AT2608M	\$18.20	\$8.89	\$3.56	

TABLE A -- NEW TELEPHONE INSTRUMENTS AND MISCELLANEOUS EQUIPMENT

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ITEM NO.	ITEM	MANUFACTURER/ MANUFACTURER'S PART NUMBER	PURCHASE NEW UNIT PRICE	INSTALL OR MOVE UNIT PRICE	DEINSTALL UNIT PRICE	MONTHLY MAINTENANCE UNIT PRICE
79.	RJ2DX TYPE JACK	RELIABLE S771071	\$3.23	\$8.89	\$3.56	
80.	RJ36X TYPE JACK	ALLEN-TEL AT268	\$2.45	\$8.89	\$3.56	
81.	RJ41S TYPE JACK	ALLEN-TEL AT697B-K	\$1.53	\$8.89	\$3.56	
82.	RJ41X TYPE JACK	ALLEN-TEL AT697B-NK	\$1.62	\$8.89	\$3.56	
83.	RJ42M TYPE JACK	SUTTLE SE697B8NKF	\$1.62	\$8.89	\$3.56	
84.	RJ43M TYPE JACK	SUTTLE SE697B8F	\$1.62	\$8.89	\$3.56	
85.	RJ45S	ALLEN-TEL AT103A8-52	\$3.88	\$8.89	\$3.56	
86.	RJ45 (LEVEL 5)	LUCENT TECH. M100BH1/M10 NORDX/CDT AX101045/A0405256	\$10.49	\$8.89	\$3.56	
86A.	LEVEL 7 (GIGA SPEED) JACK	LUCENT TECH. MGS-200 NORDX/CDT AX101064/A0405256	\$10.49	\$8.89	\$3.56	
87.	DUPLEX JACK (RJ11-RJ45)	LEVEL 3/LEVEL 5 LUCENT TECH M1BH1/M100BH1/M12 NORDX/CDT (2) AX101045 / (1) A0405261	\$13.42	\$8.89	\$3.56	
88.	SINGLE MUFF HEADSET TO WORK WITH OFFERED EKS	PLANTRONICS H51 WITH M12	\$126.50	\$8.89	\$3.56	
89.	24 PORT PATCH PANEL, LEVEL 3	LUCENT TECH. 1100AA2-24	\$68.76	\$35.55	\$17.79	
90.	48 PORT PATCH PANEL, LEVEL 3	LUCENT TECH. 1100AA2-48	\$136.58	\$35.55	\$17.79	
91.	96 PORT PATCH PANEL, LEVEL 3	LUCENT TECH. (2) 1100AA2-48	\$249.79	\$35.55	\$17.79	
92.	24 PORT PATCH PANEL, LEVEL 5	LUCENT TECH. 1100CAT5-24A NORDX/CDT AX100446	\$96.87	\$35.55	\$17.79	
92A.	24 PORT PATCH PANEL, LEVEL 7	LUCENT TECH. PM2151A-24GS NORDX/CDT AX100522 / (24) AX101066	\$197.43	\$35.55	\$17.79	
93.	48 PORT PATCH PANEL, LEVEL 5	LUCENT TECH.	\$192.60	\$35.55	\$17.79	

x

TABLE A -- NEW TELEPHONE INSTRUMENTS AND MISCELLANEOUS EQUIPMENT

#1	#2	#3	#4	#5	#6	#7
ITEM NO.	ITEM	MANUFACTURER/ MANUFACTURER'S PART NUMBER	PURCHASE NEW UNIT PRICE	INSTALL OR MOVE UNIT PRICE	DEINSTALL UNIT PRICE	MONTHLY MAINTENANCE UNIT PRICE
93A.	48 PORT PATCH PANEL, LEVEL 7	1100CAT5-48A NORDX/CDT AX100448 LUCENT TECH. PM2151A-48GS NORDX/CDT AX100518 / (48) AX101066	\$389.03	\$35.55	\$17.79	
94.	96 PORT PATCH PANEL, LEVEL 5	LUCENT TECH. 1100CAT5-96A NORDX/CDT AX100451	\$357.61	\$35.55	\$17.79	
95.	PATCH CORD, 3 FOOT, LEVEL 3	ALLEN-TEL AT-1203NK	\$1.78			
96.	PATCH CORD, 7 FOOT, LEVEL 3	ALLEN-TEL AT-1207NK	\$2.58			
97.	PATCH CORD, 15 FOOT, LEVEL 3	ALLEN-TEL AT-1215NK	\$4.34			
98.	PATCH CORD, 3 FOOT, LEVEL 5	ALLEN-TEL AT-1503-8C NORDX/CDT NXP5-RST-8-ABAB-GY-03	\$2.16			
98A.	PATCH CORD, 3 FOOT, LEVEL 7	LUCENT TECH. D8GS-3 NORDX/CDT NXLX-RSO-8-ABAB-GY-03	\$7.95			
99.	PATCH CORD, 7 FOOT, LEVEL 5	ALLEN-TEL AT-1507-8C NORDX/CDT NXP5-RST-8-ABAB-GY-07	\$2.87			
99A.	PATCH CORD, 7 FOOT, LEVEL 7	LUCENT TECH. D8GS-7 NORDX/CDT NXLX-RSO-8-ABAB-GY-07	\$9.64			
100.	PATCH CORD, 15 FOOT, LEVEL 5	ALLEN-TEL AT-1515-8C NORDX/CDT NXP5-RST-8-ABAB-GY-15	\$4.23			
100A.	PATCH CORD, 15 FOOT, LEVEL 7	LUCENT TECH. D8GS-15 NORDX/CDT NXLX-RSO-8-ABAB-GY-15	\$11.78			
101.	CORDLESS PHONE TO WORK WITH POTS SERVICE	AT&T 9320	\$54.20	\$8.89	\$3.56	\$2.29 x

TABLE A -- NEW TELEPHONE INSTRUMENTS AND MISCELLANEOUS EQUIPMENT

#1	#2	#3	#4	#5	#6	#7
ITEM NO.	ITEM	MANUFACTURER/ MANUFACTURER'S PART NUMBER	PURCHASE NEW UNIT PRICE	INSTALL OR MOVE UNIT PRICE	DEINSTALL UNIT PRICE	MONTHLY MAINTENANCE UNIT PRICE
102.	KEY LAMP MODULE	ALLEN-TEL GB836	\$148.68	\$26.68	\$5.33	\$0.57
103.	BELL EXTENSION INDOOR	ITT 000136-SCA	\$4.66	\$17.79	\$3.56	
104.	BUZZER LOCAL SIGNALLING	SUTTLE SE8A	\$0.92	\$8.89	\$3.56	
105.	BUTTON LOCAL SIGNALLING	SUTTLE SE554	\$2.03	\$17.79	\$3.56	
106.	GONG EXTENSION INDOOR	ITT 000075-SCA	\$22.88	\$17.79	\$3.56	
107.	GONG EXTENSION WEATHERPROOF	ITT PT-75BA	\$24.68	\$17.79	\$3.56	
108.	LINE STATUS INDICATOR 8 LINES	TELTREND LSM-9600	\$166.91	\$35.55	\$8.89	
109.	LINE STATUS INDICATOR 16 LINES	TELTREND LSM-9601	\$258.04	\$53.35	\$8.89	
110.	6 BUTTON CALL DIRECTOR STRIP	ITT 2564	\$60.63	\$10.66	\$3.56	\$2.29
111.	PAGING AMPLIFIER (MIN 20 WATTS)	BOGEN C20C	\$141.23	\$35.55	\$17.79	\$5.75
112.	PAGING SPEAKER INDOOR	VALCOM 1020C	\$25.72	\$35.55	\$17.79	\$1.15
113.	PAGING SPEAKER WEATHERPROOF	VALCOM 1030B	\$60.81	\$35.55	\$17.79	\$1.71
114.	GROUP 3 PLAIN PAPER FACSIMILE TRANSCIEVER	PANASONIC KX-FP81	\$141.24	\$53.35	\$17.79	\$3.44
115.	FAX MODEM, INTERNAL PC COMPATIBLE 14400 BPS	U.S. ROBOTICS SPORTSTER 14.4	\$102.28	\$35.55	\$17.79	\$1.71
116.	MODEM, EXTERNAL, 14400 BPS	U. S. ROBOTICS SPORTSTER 14.4	\$119.75	\$35.55	\$17.79	\$1.71
117.	PROPRIETARY PBX DIGITAL SINGLE LINE SET	NTI M2006	\$92.23	\$26.68	\$5.33	\$2.35
118.	PROPRIETARY PBX DIGITAL 1-8 LINE MULTI-LINE SET	NTI M2008	\$122.13	\$26.68	\$5.33	\$2.35
119.	PROPRIETARY PBX DIGITAL 1-8 LINE MULTI-LINE SET w/DISPLAY	NTI M2008D	\$207.52	\$26.68	\$5.33	\$2.35
120.	PROPRIETARY PBX DIGITAL 1-8 LINE MULTI-LINE SET WITH HANDS FREE SPEAKER	NTI M2008HF	\$148.17	\$26.68	\$5.33	\$2.35

TABLE A -- NEW TELEPHONE INSTRUMENTS AND MISCELLANEOUS EQUIPMENT

#1	#2	#3	#4	#5	#6	#7
ITEM NO.	ITEM	MANUFACTURER/ MANUFACTURER'S PART NUMBER	PURCHASE NEW UNIT PRICE	INSTALL OR MOVE UNIT PRICE	DEINSTALL UNIT PRICE	MONTHLY MAINTENANCE UNIT PRICE
121.	PROPRIETARY PBX DIGITAL 1-8 LINE MULTI-LINE SET WITH HANDS FREE SPEAKER AND DISPLAY	NTI M2008HFD	\$230.30	\$26.68	\$5.33	\$2.35
122.	PROPRIETARY PBX DIGITAL 1-16 LINE MULTI-LINE SET WITH HANDS FREE SPEAKER	NTI M2616	\$273.92	\$26.68	\$5.33	\$2.35
123.	DIGITAL SET, MULTI-LINE w/DISPLAY, M7208	NTI A0409191	\$152.25	\$30.21	\$6.04	\$2.35
124.	DIGITAL SET, 10-LINE w/DISPLAY AND SPEAKERPHONE, M7310	NTI A0409172	\$166.52	\$30.21	\$6.04	\$2.35
125.	DIGITAL SET, 20-LINE w/DISPLAY AND SPEAKERPHONE	NTI A0408187	\$226.00	\$30.21	\$6.04	\$2.35
126.	PROPRIETARY 12-LINE LCD SPEAKERPHONE TO WORK WITH DKTS	COMDIAL 8012S	\$143.80	\$30.21	\$6.04	\$2.35
127.	TYPE 1 FACEPLATE	SIMWARE 8310572	\$1.32			
128	TYPE A DATA CONNECTOR	SIMWARE 60G1070	\$6.34	\$11.00	\$3.86	
129	TYPE 1S SURFACE HOUSING	SIMWARE 4760486	\$7.40	\$5.50	\$3.86	
130	64-PORT DISTRIBUTION PANEL	SIMWARE 8642520	\$120.82	\$43.98	\$16.50	
131	BALUN ASSEMBLY 8 FT.	SIMWARE 8642546	\$19.41	\$2.75	\$3.86	
132	1 ZONE PAGING UNIT	VALCOM V-2001A	\$217.92	\$45.88	\$11.47	\$5.20 x
133	EXPANDABLE 24 ZONE PAGING UNIT WITH POWER SUPPLY	VALCOM V-2924A	\$1,096.87	\$91.76	\$22.94	\$7.20 x
134	COMBINATION BACK BOX BRIDGE	VALCOM V-9916M	\$21.94	\$11.47		\$0.60 x
135	8 MINUTE MUSIC ON HOLD	VALCOM V-9980-8	\$653.40	\$22.94	\$11.47	\$5.20 x
136	POWER SUPPLY (6 AMP)	VALCOM VP-6124	\$262.18	\$22.94	\$11.47	\$2.10 x
137	HORIZONTAL WIRE MANAGEMENT PANEL 2U	BLACK BOX JPM525A	\$16.43	\$24.00		x
138	VERTICAL WIRE MANAGEMENT PANEL	BLACK BOX RM378	\$94.94	\$35.10		x
139	24"X19" WALL MOUNT RELAY RACK	BLACK BOX RM070A-R2	\$97.60	\$35.10		x

TABLE A -- NEW TELEPHONE INSTRUMENTS AND MISCELLANEOUS EQUIPMENT

TABLE A - NEW TELEPHONE INSTRUMENTS AND MISCELLANEOUS EQUIPMENT						
#1	#2	#3	#4	#5	#6	#7
ITEM NO.	ITEM	MANUFACTURER/ MANUFACTURER'S PART NUMBER	PURCHASE NEW UNIT PRICE	INSTALL OR MOVE UNIT PRICE	DEINSTALL UNIT PRICE	MONTHLY MAINTENANCE UNIT PRICE
140	36"X19" WALL MOUNT RELAY RACK (HEAVY DUTY)	BLACK BOX RM072A	\$193.60	\$35.10		
141	12"X10' LADDER RACK	BLACK BOX RM651	\$67.41	\$35.10		
142	12"X6' LADDER RACK	BLACK BOX RM650	\$43.60	\$35.10		
143	WALL ANGLE SUPPORT KIT	BLACK BOX RM655	\$14.00	\$24.00		
144	RACK TO RUNWAY KIT	BLACK BOX RM 653	\$16.51	\$24.00		
145	90 DEGREE JUNCTION SPLICE KIT	BLACK BOX RM656	\$5.76			
146	BUT SPLICE KIT	BLACK BOX RM657	\$5.63			
147	LD3 HINGED RACEWAY 6'	BLACK BOX 36910	\$10.08	\$24.00		
148	LD3 DROP CEILING CONNECTOR	BLACK BOX 36917	\$1.28			
149	LD3 INTERNAL ELBOW	BLACK BOX 36915	\$1.04			
150	LD3 EXTERNAL ELBOW	BLACK BOX 36916	\$1.02			
151	LD5 HINGED RACEWAY 6'	BLACK BOX 36948	\$11.12	\$24.00		
152	LD5 DROP CEILING CONNECTOR	BLACK BOX 36924	\$1.28			
153	LD5 INTERNAL ELBOW	BLACK BOX 36922	\$1.12			
154	LD5 EXTERNAL ELBOW	BLACK BOX 36923	\$1.12			
155	LD10 HINGED RACEWAY 6'	BLACK BOX 36949	\$15.20			
156	LD10 DROP CEILING CONNECTOR	BLACK BOX 36932	\$1.28	\$24.00		
157	LD10 INTERNAL ELBOW	BLACK BOX 36930	\$1.20			
158	LD10 EXTERNAL ELBOW	BLACK BOX 36931	\$1.20			
159	SINGLE GANG SURFACE MOUNT BOX	BLACK BOX 36935	\$4.16	\$9.60		
160	DOUBLE GANG SURFACE MOUNT BOX	BLACK BOX 36936	\$6.72	\$9.60		

Price Table C.

New Analog EKTS and Digital DKTS Electronic Key Telephone Systems Common Equipment. This price table shall be used to purchase New Electronic Key Telephone Systems Common Equipment. It shall also be used for installation and de-installation of these units and Government-owned like equipment. The prices include cabinet, racks, power supply, intercom (with distinctive tone or buzz), internal wiring harness, and other components, referred to as "ancillary devices/equipment" parts or devices, including line and station cards, which are required for a complete operational key system to allow for line and station arrangements and programming. The prices contained in this table DO NOT include telephone, line cabling, electrical or environmental requirements. Prices for EKTS telephones are labeled Electronic Key System and are found in Price Table A. Individual configurations listed in this price table may be modified by using Table E if allowed by the cabinet provided for the size configuration ordered.

***Table C, Items 1-14 are for the Analog (EKTS) Electronic Key Systems.
Table C, Items 15-26 are for the Digital (DKTS) Electronic Key Systems.
Please note that in Table E, Items 1-15 are for Analog (EKTS) Systems and
Items 16-30 are for Digital (DKTS) Systems.***

**TABLE C ---NEW ANALOG AND DIGITAL ELECTRONIC KEY
TELEPHONE SYSTEMS COMMON EQUIPMENT**

#1 ITEM NO.	#2 CONFIGURATION LINES/STATIONS	#3 MANUFACTURER'S PART NUMBER	#4 PURCHASE NEW UNIT PRICE	#5 INSTALL OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE
1.	RESERVED				
2.	RESERVED				
3.	RESERVED				
4.	RESERVED				
5.	RESERVED				
6.	RESERVED				
7.	RESERVED				
8.	RESERVED				
9.	RESERVED				
10.	RESERVED				
11.	RESERVED				
12.	RESERVED				
13.	RESERVED				
14.	RESERVED				
15.	RESERVED				
16.	RESERVED				
17.	RESERVED				
18.	RESERVED				
19.	RESERVED				
20.	12/60 DIGITAL	FXII-01 INCLUDES: CPU-I, SOFTWARE, (4) FXLDS-16 (1) FXLST-16	\$5,645.83	864.92	52.55 X

**TABLE C ---NEW ANALOG AND DIGITAL ELECTRONIC KEY
TELEPHONE SYSTEMS COMMON EQUIPMENT**

#1 ITEM NO.	#2 CONFIGURATION LINES/STATIONS	#3 MANUFACTURER'S PART NUMBER	#4 PURCHASE NEW UNIT PRICE	#5 INSTALL OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE	
21.	RESERVED					
22.	16/52 DIGITAL	FXII-01 INCLUDES: CPU-I, SOFTWARE, (4) FXLDS-16 (1) FXLST-16	\$5,645.83	864.92	52.55	X
23.	16/60 DIGITAL	FXII-01 INCLUDES: CPU-I, SOFTWARE, (4) FXLDS-16 (1) FXLST-16	\$5,645.83	864.92	52.55	X
24.	RESERVED					
25.	20/60 DIGITAL	FXII-01 INCLUDES: CPU-II, SOFTWARE EXPANSION CABINET (4) FXLDS-16 (2) FXLST-16	\$9,406.16	996.38	70.06	X
26.	30/70 DIGITAL	FXII-01 INCLUDES: CPU-II, SOFTWARE EXPANSION CABINET (5) FXLDS-16 (3) FXLST-16	\$12,975.62	1086.96	70.06	X
27.	RESERVED					X
28.	8/16 DIGITAL	COMDIAL IMPACT DSU II PKG INCL: (1) J0816 DSU II (1) 8024S LCD SPEAKERPHONE (4) 8012S LCD SPEAKER PHONE	\$1,476.46	946.25	35.28	
29.	RESERVED					X
30.	DSU II EXPANSION MODULE	COMDIAL JM408 4-LINE, 8-STATION EXPANSION MODULE	\$648.29	222.07	35.28	X
31.	SINGLE USER	COMDIAL	\$166.17	36.53		

**TABLE C ---NEW ANALOG AND DIGITAL ELECTRONIC KEY
TELEPHONE SYSTEMS COMMON EQUIPMENT**

#1	#2	#3	#4	#5	#6
ITEM NO.	CONFIGURATION LINES/STATIONS	MANUFACTURER'S PART NUMBER	PURCHASE NEW UNIT PRICE	INSTALL OR MOVE UNIT PRICE	DEINSTALL UNIT PRICE
	DSU II SOFTWARE	DSUII-SW01			
32.	RESERVED				X
33.	RESERVED				X
34.	RESERVED				X

Price Table D.

New 1A2 Key Telephone System Enhancements. This table specifies New 1A2 Key Telephone System Enhancements and will be used to purchase, install, move, or de-install enhancements. Hourly rates for follow-on training are also provided in this table.

TABLE D -- NEW 1A2 KEY TELEPHONE SYSTEM ENHANCEMENTS

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE NEW UNIT PRICE	#5 INSTALL OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE
1.	ADD, REMOVE, OR CHANGE LINE OR INTERCOM APPEARANCE(S) OR AUDIBLE SIGNALLING ON A PER SET BASIS	N/A		\$17.79	\$17.79
2.	FURNISH AND INSTALL LINE/STA CARD AND CONNECT LEC PROVIDED DIAL TONE INTO 1A2 COMMON EQUIP.	ITT 400E	\$18.00	\$17.79	\$3.56
3.	INSTALL GOV'T OWNED LINE/STA CARD AND CONNECT LEC PROVIDED DIAL TONE INTO 1A2 COMMON EQUIP.	N/A		\$17.79	\$3.56
4.	ON-SITE HOURLY LABOR RATE	N/A		\$45.88	
5.	HOURLY FOLLOW-ON TRAINING RATE	N/A		\$45.88	
6.	OVERTIME HOURLY LABOR RATE	N/A		\$51.62	
7.	DROP AND REMOUNT	N/A		\$8.89	
8.	KTU RELAY RACK	SAUNDERS 5B-546-048	\$77.59	\$35.55	\$8.89
9.	LAMP EXTENDER	MELCO KT-631	\$163.89	\$35.55	\$17.79

TABLE D -- NEW 1A2 KEY TELEPHONE SYSTEM ENHANCEMENTS

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE NEW UNIT PRICE	#5 INSTALL OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE
10.	KTS POWER SUPPLY	ITT 677108-000-000	\$112.78	\$35.55	\$17.79
11.	TYPE 584C PANEL	ITT 000584-0C1-00	\$80.85	\$71.11	\$35.55
12.	TYPE 620 PANEL	WESTERN ELECTRIC 620 A2	\$45.12	\$71.11	\$35.55
13.	AUTOMATIC CALL SEQUENCER (10 LINE UNIT)	VIKING TMS-12	\$1,605.72	\$106.66	\$106.66
14.	POWERLINE SURGE PROTECTOR (FOR EITHER 1A2 OR EKS)	TRIPLITE ULTRA BLOCK 428-15A	\$27.40	\$8.89	\$3.56
15.	2 ELECTRODE GAS PROTECTOR (FOR EITHER 1A2 OR EKS)	RELIABLE 350SVSR2	\$9.29	\$8.89	\$8.89
16.	1A2 USER'S GUIDE	1A2 USER'S GUIDE	\$1.51		
17	4'X4'X3/4" PAINTED PLYWOOD BACKBOARD		\$48.00	\$96.00	X
18	8'X4'X3/4" PAINTED PLYWOOD BACKBOARD		\$80.00	\$120.00	X
19	FIREWALL PENETRATION DRYWALL 1" INCLUDES BUSHINGS, SLEEVE, AND FIRESTOP MATERIAL		\$4.16	\$32.00	X
20	FIREWALL PENETRATION DRYWALL 2" INCLUDES BUSHINGS, SLEEVE, AND FIRESTOP MATERIAL		\$8.80	\$40.00	X

TABLE D -- NEW 1A2 KEY TELEPHONE SYSTEM ENHANCEMENTS

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE NEW UNIT PRICE	#5 INSTALL OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE	
21	FIREWALL PENETRATION DRYWALL 3" INCLUDES BUSHINGS, SLEEVE, AND FIRESTOP MATERIAL		\$19.20	\$48.00		X
22	FIREWALL PENETRATION DRYWALL 4" INCLUDES BUSHINGS, SLEEVE, AND FIRESTOP MATERIAL		\$28.80	\$64.00		X
23	FIREWALL PENETRATION MASONRY 1" INCLUDES BUSHINGS, SLEEVE, AND FIRESTOP MATERIAL		\$4.16	\$48.00		X
24	FIREWALL PENETRATION MASONRY 2" INCLUDES BUSHINGS, SLEEVE, AND FIRESTOP MATERIAL		\$8.80	\$56.00		X
25	FIREWALL PENETRATION MASONRY 3" INCLUDES BUSHINGS, SLEEVE, AND FIRESTOP MATERIAL		\$19.20	\$64.00		X
26	FIREWALL PENETRATION MASONRY 4" INCLUDES BUSHINGS, SLEEVE, AND FIRESTOP MATERIAL		\$28.80	\$80.00		X
27	FLOOR CORE PENETRATION 2" INCLUDES BUSHINGS, SLEEVE, AND FIRESTOP MATERIAL		\$8.80	\$96.00		X
28	FLOOR CORE PENETRATION 4" INCLUDES BUSHINGS, SLEEVE, AND FIRESTOP MATERIAL		\$28.80	\$128.00		X

Price Table E.

New Electronic Telephone System Enhancements. This table specifies New Electronic Telephone Enhancements available for ordering for use with Contractor provided and Government-owned equipment. This table may be used to purchase, install, move, or de-install these enhancements.

Please note that Items 1-15 are for Analog (EKTS) Key Systems and Items 16-30 are for Digital (DKTS) Key Systems.

TABLE E -- NEW ELECTRONIC TELEPHONE SYSTEM ENHANCEMENTS

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE NEW UNIT PRICE	#5 INSTALL OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE	#7 MONTHLY MAINTENANCE UNIT PRICE	
1.	PROVIDE AND INSTALL LINE/STATION CARD TO ACCOMMODATE TWELVE (12) STATIONS AND CONNECT STATION TELEPHONE CABLE INTO THE ELECTRONIC KEY COMMON EQUIPMENT AS REQUIRED 2 REQUIRED FOR 12 STATIONS	COMDIAL JM408	\$648.29	\$92.85	\$17.79		x
2.	INSTALL GOVERNMENT OWNED LINE CARD AND CONNECT LEC PROVIDED DIAL TONE INTO THE ELECTRONIC KEY COMMON EQUIPMENT	N/A		\$92.85	\$17.79		
3.	INSTALL GOV'T OWNED STATION CARD AND CONNECT STATION INSTRUMENT CABLE INTO ELECTRONIC KEY COMMON EQUIPMENT	N/A		\$92.85	\$17.79		
4.	ADD, REMOVE, OR CHANGE LINE OR INTERCOM APPEARANCE(S) OR AUDIBLE SIGNALLING ON A PER SET BASIS	N/A		\$8.89	\$8.89		
5.	RESERVED						
6.	REMOTE DIAGNOSTICS	US ROBOTICS SPORTSTER 14.4	\$135.78	\$35.55	\$17.79		
7.	MAINTENANCE CONSOLE/TERMINAL	COMDIAL VDT-22	\$317.60	\$17.79	\$8.89		
8.	LEAST COST ROUTING	N/A					
9.	SELF TEST DIAGNOSTICS	INCLUDED WITH ALL COMDIAL EKS					
10.	SMDR/CDR	OKIDATA 184	\$333.46	\$17.79	\$8.89		
11.	AUTOMATIC CALL DISTRIBUTOR (10 LINE UNIT)	TEC INTERNATIONAL PN69200-10 CPSI	\$7,076.98	\$106.66	\$106.66		
12.	RESERVED						x

TABLE E -- NEW ELECTRONIC TELEPHONE SYSTEM ENHANCEMENTS

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE NEW UNIT PRICE	#5 INSTALL OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE	#7 MONTHLY MAINTENANCE UNIT PRICE	
13.	RESERVED						X
14.	RESERVED						X
15.	EKTS USER'S GUIDE	COMDIAL USER'S GUIDE	\$1.77				
16.	PROVIDE AND INSTALL LINE/STATION CARD TO ACCOMMODATE TWELVE (12) STATIONS AND CONNECT STATION TELEPHONE CABLE INTO THE ELECTRONIC KEY COMMON EQUIPMENT AS REQUIRED 2 REQUIRED FOR 12 STATIONS	JM408	\$648.29	\$92.85	\$17.79		X
17.	INSTALL GOVERNMENT OWNED LINE CARD AND CONNECT LEC PROVIDED DIAL TONE INTO THE ELECTRONIC KEY COMMON EQUIPMENT	N/A		\$92.85	\$17.79		
18.	INSTALL GOV'T OWNED STATION CARD AND CONNECT STATION INSTRUMENT CABLE INTO ELECTRONIC KEY COMMON EQUIPMENT	N/A		\$92.85	\$17.79		
19.	ADD, REMOVE, OR CHANGE LINE OR INTERCOM APPEARANCE(S) OR AUDIBLE SIGNALLING ON A PER SET BASIS	N/A		\$8.89	\$8.89		
20.	CONSOLE WITH ATTENDANT BUSY LAMP FIELD	COMDIAL IMPACT COMDIAL 8012S WITH IB64X	\$425.56	\$35.55	\$8.89		X
21.	REMOTE DIAGNOSTICS	US ROBOTICS SPORTSTER 14.4	\$135.78	\$35.55	\$17.79		
22.	MAINTENANCE CONSOLE/TERMINAL	COMDIAL VDT-22	\$317.60	\$17.79	\$8.89		
23.	LEAST COST ROUTING	N/A					
24.	SELF TEST DIAGNOSTICS	INCLUDED WITH ALL COMDIAL DKS.					

TABLE E -- NEW ELECTRONIC TELEPHONE SYSTEM ENHANCEMENTS

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE NEW UNIT PRICE	#5 INSTALL OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE	#7 MONTHLY MAINTENANCE UNIT PRICE
25.	SMDR/CDR	OKIDATA 184	\$333.46	\$17.79	\$8.89	
26.	AUTOMATIC CALL DISTRIBUTOR (10 LINE UNIT)	TEC INTERNATIONAL PN69200-10 CPSI	\$7,076.98	\$106.66	\$106.66	
27.	RESERVED					X
28.	RESERVED					X
29.	RESERVED					X
30.	EKTS USER'S GUIDE	COMDIAL IMPACT SYSTEM USERS GUIDE	\$1.77			
31.	RESERVED					X
32.	RESERVED					X
33.	RESERVED					X
34.	DID CARTRIDGE, NORSTAR	NT5B37GA-93	\$550.00	\$28.67	\$8.26	X
35.	E&M CARTRIDGE, NORSTAR	NT5B38GA-93	\$416.29	\$28.67	\$8.26	X
36.	RESERVED					X
37.	RESERVED					X

TABLE E -- NEW ELECTRONIC TELEPHONE SYSTEM ENHANCEMENTS

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE NEW UNIT PRICE	#5 INSTALL OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE	#7 MONTHLY MAINTENANCE UNIT PRICE	
38.	POWER BAR, NORSTAR	NT5B56AA	\$14.52	\$14.32	\$5.30		X
39.	MODULAR ICS XC RELEASE 5.0 SOFTWARE	NT7B83AAAB	\$1,352.00	\$20.16			X
40.	STATION MESSAGE DETAIL RECORDING UNIT, NORSTAR	NT8B95AAAE	\$365.00	\$109.65	\$18.02		X
41.	RESERVED						
42.	CENTREX PLUS SOFTWARE NORSTAR	NT5B30DE-93	\$468.25	\$80.59			X
43.	UPS (4 HRS MIN AT MAX CAPACITY)	MMXRT600 XRTB91	\$1,034.15	\$80.59	\$40.29	\$2.91	
44.	UPS (2 HRS)	MMA1250	\$298.66	\$80.59	\$28.50	\$2.15	
45.	FAST-REMOTE ACCESS DEVICE FAST RAD	NT8B80AAAB	\$202.20	\$33.02	\$7.07		X
46.	ATA-ANALOG TERMINAL ADAPTER DKTS, NORSTAR	NT8B90AL-93	\$142.72	\$30.66	\$8.26		X
47.	NORSTAR REMOTE UTILITIES 9.0	NTAB3359	\$356.83	\$55.42	\$28.31		X
48.	NORSTAR MODULAR ICS KSU (0x32) w/ MODULAR ICS XC RELEASE 5.0 SOFTWARE	NT7B53FA-93 NT7B83AAAB	\$2,132.00	\$330.15	\$55.42		X
49.	NORSTAR FIBER 2 PORT EXPANSION CARTRIDGE (ICS)	NTBB02GA-93	\$261.67	\$22.39	\$22.39		X
50.	RESERVED						X
51.	NORSTAR FIBER 6 PORT EXPANSION CARTRIDGE (ICS)	NTBB06GA-93	\$713.63	\$37.73	\$37.73		X
52.	RESERVED						X

TABLE E -- NEW ELECTRONIC TELEPHONE SYSTEM ENHANCEMENTS

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE NEW UNIT PRICE	#5 INSTALL OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE	#7 MONTHLY MAINTENANCE UNIT PRICE	
53.	NORSTAR COMBINATION FIBER 6 PORT EXPANSION CARTRIDGE FOR T-1	NTBB25GA-93	\$749.32	\$37.73	\$37.73		X
54.	NORSTAR DIGITAL TRUNK INTERFACE	NT7B74GA-93	\$1,712.74	\$120.87	\$20.16		X
55.	NORSTAR SERVICES CARTRIDGE	NTBB24GA-93	\$285.46	\$28.01	\$14.15		X
56.	NORSTAR FIBER STATON MODULE	NTBB41FB-93	\$559.02	\$37.73	\$28.01		X
57.	NORSTAR FIBER TRUNK MODULE	NTBB20FB-93	\$321.14	\$37.73	\$28.01		X
58.	NORSTAR ANALOG TRUNK CARTRIDGE	NT7B69AAAA	\$273.56	\$28.01	\$14.15		X
59.	VOICEMAIL, MODEL 2 RLS 4.0	NT5B74-AABB	\$3,612.59	\$322.35	\$56.01	\$18.77	X
60.	VOICEMAIL, MODEL 4 RLS 4.0	NT5B74-AABR	\$4,626.71	\$322.35	\$56.01	\$24.19	X
61.	VOICEMAIL, MODEL 6 RLS 4.0	NT5B74-AAAU	\$6,169.55	\$483.44	\$56.01	\$31.09	X
62.	STARTALK, FLASH 2 (24MBX)	NT5B07-AABE	\$1,570.00	\$322.35	\$56.01	\$7.60	X
63.	STARTALK, FLASH 4 (48MBX)	NT5B07-AABF	\$2,331.22	\$483.44	\$56.01	\$11.29	X

Price Table F.

Purchase of New Cable (per foot basis). This table specifies the unit price of the Purchase of New Cable (per foot basis), by cable pair count and cable type purchased, installed, and de-installed, on a per foot basis. It is the option of the ordering agency to use the flat rate wiring price in Table H or the per foot prices in price Table F.

In the case where embedded wire is available for reuse, price Table G shall be used to provide cross connects rather than price Table F or H.

Lucent Technologies Systimax Structured Cabling Systems. Lucent Technologies Systimax Structured Cabling Systems are available through this price schedule at no additional cost to the government. The Systimax Structured Cabling Systems provide a Lucent Technologies (formerly AT&T) 15-year warranty on cabling systems which are designed and installed using Lucent Technologies Systimax components throughout.

Should you elect to use Systimax Structured Cabling Systems, please contact the Black Box Engineering Department to ensure that your selection and design conform to Systimax requirements before you place your order.

Black Box Engineering Department: Name: Rick Robinson
Phone: 1-800-766-POTS

TABLE F -- PURCHASE OF NEW CABLE (PER FOOT BASIS)

#1 ITEM NO.	#2 ITEM	#3 TELEPHONE NON-PLENUM PRICE/FOOT	#4 TELEPHONE FLUOROPOLYMER AIR/PLENUM PRICE/FOOT	#5 LEVEL 3 AIR/PLENUM PRICE/FOOT	#6 LEVEL 5 AIR/PLENUM PRICE/FOOT	#7 INSTALL/ DEINSTALL OF CABLE PRICE/FOOT	#8 LEVEL 3 PVC	#9 LEVEL 5 PVC	#10 LEVEL 7 (1.2Gbps) GIGA SPEED PVC PRICE/FOOT	#11 LEVEL 7 (1.2Gbps) GIGA SPEED PLENUM PRICE/FOOT
1.	2 PAIR General Cable #:	\$0.04 7042252	\$0.07 2131072	\$0.09 2131243	\$0.21 2131359	\$0.37				
2.	4 PAIR General Cable #: Lucent Tech. NORDX/CDT	\$0.07 7042260	\$0.09 2131074	\$0.11 2131245 2010 24571186	\$0.33 2131278 2061D+ IBDN 1213	\$0.40	\$0.08 1010 24501941	\$0.18 1061 IBDN 1212	\$0.21 1071 IBDN 2412	\$0.56 2071 IBDN FLEX 2413
3.	6 PAIR General Cable #:	\$0.09 6959589	\$0.15 2131071	\$0.17 2131246	\$0.39 2131362	\$0.39				
4.	8 PAIR General Cable #:	\$0.15 (2ea)7042260	\$0.20 7059975	\$0.21 2131209	\$0.66 2131378	\$0.44				
5.	12 PAIR General Cable #:	\$0.20 6959605	\$0.28 7035645	\$0.36 2131269	\$0.75 (2ea)2131362	\$0.48				

TABLE F -- PURCHASE OF NEW CABLE (PER FOOT BASIS)

#1 ITEM NO.	#2 ITEM	#3 TELEPHONE NON-PLENUM PRICE/FOOT	#4 TELEPHONE FLUOROPOLYMER AIR/PLENUM PRICE/FOOT	#5 LEVEL 3 AIR/PLENUM PRICE/FOOT	#6 LEVEL 5 AIR/PLENUM PRICE/FOOT	#7 INSTALL/ DEINSTALL OF CABLE PRICE/FOOT	#8 LEVEL 3 PVC	#9 LEVEL 5 PVC	#10 LEVEL 7 (1.2Gbps) GIGA SPEED PVC PRICE/FOOT	#11 LEVEL 7 (1.2Gbps) GIGA SPEED PLENUM PRICE/FOOT
6.	25 PAIR General Cable #: Lucent Tech. NORDX/CDT	\$0.41 6959647	\$0.59 7056682	\$0.74 2131256 2010 24571225	\$2.06 2131373 2061A 24572353	\$1.05	\$0.57	\$1.28		
7.	50 PAIR General Cable #:	\$0.67 6959662	\$1.10 7056633			\$1.36				
8.	100 PAIR General Cable #:	\$1.30 6959704	\$2.17 7056641			\$2.05				
9.	200 PAIR General Cable #:	\$2.57 6970032	\$4.66 7056666			\$2.98				

TABLE F -- PURCHASE OF NEW CABLE (PER FOOT BASIS)

#1 ITEM NO.	#2 ITEM	#3 TELEPHONE NON-PLENUM PRICE/FOOT	#4 TELEPHONE FLUOROPOLYMER AIR/PLENUM PRICE/FOOT	#5 LEVEL 3 AIR/PLENUM PRICE/FOOT	#6 LEVEL 5 AIR/PLENUM PRICE/FOOT	#7 INSTALL/ DEINSTALL OF CABLE PRICE/FOOT	#8 LEVEL 3 PVC	#9 LEVEL 5 PVC	#10 LEVEL 7 (1.2Gbps) GIGA SPEED PVC PRICE/FOOT	#11 LEVEL 7 (1.2Gbps) GIGA SPEED PLENUM PRICE/FOOT
10.	600 PAIR General Cable #:	\$7.34 7042377				\$6.42				
11.	900 PAIR General Cable #:	\$10.90 (1ea)7042377 +(1ea)7042344				\$9.25				

* Lucent and NORDX/CDT Part Numbers Apply to Columns 5, 6, 8, 9, 10 and 11 Only.

Price Table G.

Cable Cross Connect. This table covers Cable Cross Connect requirements for wire services between campus buildings, between floors within a building, or between a telephone and its common equipment or wire closet when there is embedded cable available for reuse. The prices reflect a per installation charge for all cross connects on embedded wire and station interface connectors, jacks or connectors necessary to deliver dial tone from the LEC's network interface or PBX system interface connectors. It also includes jacks or connectors necessary to deliver dial tone from the LEC's network interface or PBX system interface points to the telephone, including the identification of LEC or PBX interface point(s). Identification of cable pairs by toning, or other means, is included in this price. There shall be no separate cross connect charges associated with the installation of new wire covered in Price Tables F and H.

Lucent Technologies Systimax Structured Cabling Systems. Lucent Technologies Systimax Structured Cabling Systems are available through this price schedule at no additional cost to the government. The Systimax Structured Cabling Systems provide a Lucent Technologies (formerly AT&T) 15-year warranty on cabling systems which are designed and installed using Lucent Technologies Systimax components throughout.

Should you elect to use Systimax Structured Cabling Systems, please contact the Black Box Engineering Department to ensure that your selection and design conform to Systimax requirements before you place your order.

Black Box Engineering Department: Name: Rick Robinson
Phone: 1-800-766-POTS

TABLE G -- CABLE CROSS CONNECTS

#1 ITEM NO.	#2 CROSS CONNECT CABLE USAGE	#3 CROSS CONNECT PER INSTALLATION UNIT PRICE
1.	UP TO 4 PAIR LUCENT TECH. CCW-F	\$9.48
2.	6 TO 12 PAIR LUCENT TECH. CCW-F	\$17.24
3.	25 PAIR LUCENT TECH. CCW-F	\$26.74
4.	50 PAIR LUCENT TECH. CCW-F	\$51.73
5.	100 PAIR LUCENT TECH. CCW-F	\$85.68
6.	200 PAIR LUCENT TECH. CCW-F	\$115.61
7.	600 PAIR LUCENT TECH. CCW-F	\$346.85
8.	900 PAIR LUCENT TECH. CCW-F	\$430.37

Price Table H.

Flat Rate Wiring. This table specifies the Flat Rate Wiring price for labor, wire, terminal block, cross connects, connections, and all other hardware necessary to connect non-key telephones to the wire closet or key telephones to the common equipment.

Lucent Technologies Systimax Structured Cabling Systems. Lucent Technologies Systimax Structured Cabling Systems are available through this price schedule at no additional cost to the government. The Systimax Structured Cabling Systems provide a Lucent Technologies (formerly AT&T) 15-year warranty on cabling systems which are designed and installed using Lucent Technologies Systimax components throughout.

Should you elect to use Systimax Structured Cabling Systems, please contact the Black Box Engineering Department to ensure that your selection and design conform to Systimax requirements before you place your order.

Black Box Engineering Department: Name: Rick Robinson
Phone: 1-800-766-POTS

TABLE H -- NEW WIRING WITH FLAT RATE PRICES

#1 ITEM NO.	#2 ITEM	#3 PVC FLAT RATE PRICE PER INSTRUMENT	#4 FLUOROPOLYMER AIR/PLENUM FLAT RATE PRICE PER INSTRUMENT	#5 LEVEL 3 AIR/PLENUM FLAT RATE PRICE PER INSTRUMENT	#6 LEVEL 5 AIR/PLENUM FLAT RATE PRICE PER INSTRUMENT	#7 LEVEL 3 PVC FLAT RATE PRICE PER INSTRUMENT	#8 LEVEL 5 PVC FLAT RATE PRICE PER INSTRUMENT	#9 LEVEL 7 (1.2Gbps) GIGA SPEED - PVC FLAT RATE PRICE PER INSTRUMENT	#10 LEVEL 7 (1.2Gbps) GIGA SPEED - PLENUM FLAT RATE PRICE PER INSTRUMENT
1.	SINGLE LINE SET (1 - 100 FT) General Cable #: LUCENT TECH. NORDX/CDT	\$56.86 7023047	\$61.15 2131073	\$63.44 2131245 2010 M10/M1BH1 110AW2/110C-4 24571186 A0405256 AX101045 AX100691 AX100707	\$93.69 2131278 2061D+ M10/M100BH1 110AW2/110C-4 IBDN 1213 A0405256 AX101045 AX100691 AX100707	\$57.95 M10/M1BH 110AW2/110C-4 24501941 A0405256 AX101045 AX100691 AX100707	\$79.80 M10/M100BH1 110AW2/110C-4 IBDN 1212 A0405256 AX101045 AX100691 AX100707	\$86.41 M10/MGS200 110AW2/110C-4 IBDN 2412 A0405256 AX101045 AX100691 AX100707	\$106.05 M10/MGS200 110AW2/110C-4 IBDN FLEX 2413 A0405256 AX101045 AX100691 AX100707
2.	SINGLE LINE SET (101-200 FT) General Cable #: LUCENT TECH. NORDX/CDT	\$76.47 7023047	\$86.30 2131073	\$89.93 2131245 2010 M10/M1BH1 110AW2/110C-4 24571186 A0405256 AX101045 AX100691 AX100707	\$149.20 2131278 2061D+ M10/M100BH1 110AW2/110C-4 IBDN 1213 A0405256 AX101045 AX100691 AX100707	\$81.98 M10/M1BH 110AW2/110C-4 24501941 A0405256 AX101045 AX100691 AX100707	\$107.02 M10/M100BH1 110AW2/110C-4 IBDN 1212 A0405256 AX101045 AX100691 AX100707	\$118.35 M10/MGS200 110AW2/110C-4 IBDN 2412 A0405256 AX101045 AX100691 AX100707	\$171.99 M10/MGS200 110AW2/110C-4 IBDN FLEX 2413 A0405256 AX101045 AX100691 AX100707
3.	SINGLE LINE SET (201-300 FT) General Cable #: LUCENT TECH. NORDX/CDT	\$81.36 7023047	\$96.08 2131073	\$101.57 2131245 2010 M10/M1BH1 110AW2/110C-4 24571186 A0405256 AX101045 AX100691 AX100707	\$185.06 2131278 2061D+ M10/M100BH1 110AW2/110C-4 IBDN 1213 A0405256 AX101045 AX100691 AX100707	\$93.42 M10/M1BH 110AW2/110C-4 24501941 A0405256 AX101045 AX100691 AX100707	\$134.37 M10/M100BH1 110AW2/110C-4 IBDN 1212 A0405256 AX101045 AX100691 AX100707	\$171.21 M10/MGS200 110AW2/110C-4 IBDN 2412 A0405256 AX101045 AX100691 AX100707	\$221.51 M10/MGS200 110AW2/110C-4 IBDN FLEX 2413 A0405256 AX101045 AX100691 AX100707

TABLE H -- NEW WIRING WITH FLAT RATE PRICES

#1 ITEM NO.	#2 ITEM	#3 PVC FLAT RATE PRICE PER INSTRUMENT	#4 FLUOROPOLYMER AIR/PLENUM FLAT RATE PRICE PER INSTRUMENT	#5 LEVEL 3 AIR/PLENUM FLAT RATE PRICE PER INSTRUMENT	#6 LEVEL 5 AIR/PLENUM FLAT RATE PRICE PER INSTRUMENT	#7 LEVEL 3 PVC FLAT RATE PRICE PER INSTRUMENT	#8 LEVEL 5 PVC FLAT RATE PRICE PER INSTRUMENT	#9 LEVEL 7 (1.2Gbps) GIGA SPEED - PVC FLAT RATE PRICE PER INSTRUMENT	#10 LEVEL 7 (1.2Gbps) GIGA SPEED - PLENUM FLAT RATE PRICE PER INSTRUMENT
4.	PROP SETS EKS OR PBX (1 - 100 FT) General Cable #: LUCENT TECH. NORDX/CDT	\$56.86 7023047	\$61.15 2131073	\$63.44 2131245 2010 M10/M1BH1 110AW2/110C-4 24571186 A0405256 AX101045 AX100691 AX100707	\$93.69 2131278 2061D+ M10/M100BH1 110AW2/110C-4 IBDN 1213 A0405256 AX101045 AX100691 AX100707	\$57.95 M10/M1BH 110AW2/110C-4 24501941 A0405256 AX101045 AX100691 AX100707	\$79.80 M10/M100BH1 110AW2/110C-4 IBDN 1212 A0405256 AX101045 AX100691 AX100707	IBDN 2412 A0405256 AX101045 AX100691 AX100707	IBDN FLEX 2413 A0405256 AX101045 AX100691 AX100707
5.	PROP SETS EKS OR PBX (101-200 FT) General Cable #: LUCENT TECH. NORDX/CDT	\$76.47 7023047	\$86.30 2131073	\$89.93 2131245 2010 M10/M1BH1 110AW2/110C-4 24571186 A0405256 AX101045 AX100691 AX100707	\$149.20 2131278 2061D+ M10/M100BH1 110AW2/110C-4 IBDN 1213 A0405256 AX101045 AX100691 AX100707	\$81.98 M10/M1BH 110AW2/110C-4 24501941 A0405256 AX101045 AX100691 AX100707	\$107.02 M10/M100BH1 110AW2/110C-4 IBDN 1212 A0405256 AX101045 AX100691 AX100707	IBDN 2412 A0405256 AX101045 AX100691 AX100707	IBDN FLEX 2413 A0405256 AX101045 AX100691 AX100707
6.	PROP SETS EKS OR PBX (201-300 FT) General Cable #: LUCENT TECH. NORDX/CDT	\$81.36 7023047	\$96.08 2131073	\$101.57 2131245 2010 M10/M1BH1 110AW2/110C-4 24571186 A0405256 AX101045 AX100691	\$185.06 2131278 2061D+ M10/M100BH1 110AW2/110C-4 IBDN 1213 A0405256 AX101045 AX100691	\$93.42 M10/M1BH 110AW2/110C-4 24501941 A0405256 AX101045 AX100691	\$134.37 M10/M100BH1 110AW2/110C-4 IBDN 1212 A0405256 AX101045 AX100691	IBDN 2412 A0405256 AX101045 AX100691	IBDN FLEX 2413 A0405256 AX101045 AX100691

TABLE H -- NEW WIRING WITH FLAT RATE PRICES

#1 ITEM NO.	#2 ITEM	#3 PVC FLAT RATE PRICE PER INSTRUMENT	#4 FLUOROPOLYMER AIR/PLENUM FLAT RATE PRICE PER INSTRUMENT	#5 LEVEL 3 AIR/PLENUM FLAT RATE PRICE PER INSTRUMENT	#6 LEVEL 5 AIR/PLENUM FLAT RATE PRICE PER INSTRUMENT	#7 LEVEL 3 PVC FLAT RATE PRICE PER INSTRUMENT	#8 LEVEL 5 PVC FLAT RATE PRICE PER INSTRUMENT	#9 LEVEL 7 (1.2Gbps) GIGA SPEED - PVC FLAT RATE PRICE PER INSTRUMENT	#10 LEVEL 7 (1.2Gbps) GIGA SPEED - PLENUM FLAT RATE PRICE PER INSTRUMENT
				AX100707	AX100707	AX100707	AX100707	AX100707	AX100707
7.	6 BUTTON 1A2 SET (1 - 100 FT) General Cable #:	\$114.79 6959647	\$131.87 7056682						
8.	6 BUTTON 1A2 SET (101-200 FT) General Cable #:	\$175.02 6959647	\$214.35 7056682						
9.	6 BUTTON 1A2 SET (201-300 FT) General Cable #:	\$204.38 6959647	\$263.25 7056682						
10.	10 BUTTON 1A2 SET (1 - 100 FT) General Cable #:	\$114.79 6959647	\$131.87 7056682						
11.	10 BUTTON 1A2 SET (101-200 FT) General Cable #:	\$175.02 6959647	\$214.35 7056682.00						
12.	10 BUTTON 1A2 SET (201-300 FT) General Cable #:	\$204.38 6959647	\$263.25 7056682.00						
13.	12 BUTTON 1A2 SET (1 - 100 FT) General Cable #:	\$114.79 6959662	\$131.87 7056633						
14.	12 BUTTON 1A2 SET (101-200 FT) General Cable #:	\$162.96 6959662	\$199.57 7056633						
15.	12 BUTTON 1A2 SET (201-300 FT) General Cable #:	\$190.28 6959662	\$245.10 7056633						

TABLE H -- NEW WIRING WITH FLAT RATE PRICES

#1 ITEM NO.	#2 ITEM	#3 PVC FLAT RATE PRICE PER INSTRUMENT	#4 FLUOROPOLYMER AIR/PLENUM FLAT RATE PRICE PER INSTRUMENT	#5 LEVEL 3 AIR/PLENUM FLAT RATE PRICE PER INSTRUMENT	#6 LEVEL 5 AIR/PLENUM FLAT RATE PRICE PER INSTRUMENT	#7 LEVEL 3 PVC FLAT RATE PRICE PER INSTRUMENT	#8 LEVEL 5 PVC FLAT RATE PRICE PER INSTRUMENT	#9 LEVEL 7 (1.2Gbps) GIGA SPEED - PVC FLAT RATE PRICE PER INSTRUMENT	#10 LEVEL 7 (1.2Gbps) GIGA SPEED - PLENUM FLAT RATE PRICE PER INSTRUMENT
16.	20 BUTTON 1A2 SET (1- 100 FT) General Cable #:	\$194.69 6959662	\$238.06 7056633						
17.	20 BUTTON 1A2 SET (101-200 FT) General Cable #:	\$269.34 6959662	\$356.05 7056633						

* Lucent and NORDX/CDT part numbers apply to Columns 5, 6, 7 ,8, 9 and 10 ONLY.

Price Table I.

New Digital PBX Common Equipment. This table provides prices for New Digital PBX Common Equipment. Systems shall be available in the configurations shown in the “configuration” column (column 2) of the price table. Individual configurations listed in the price table can be upsized or downsized in accordance with the prices contained in Table J if allowed by the cabinet provided for the size configuration ordered.

TABLE I -- NEW DIGITAL PBX COMMON EQUIPMENT

#1 ITEM NO.	#2 CONFIGURATION TRUNKS/STA LINES	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE UNIT PRICE	#5 INSTALL UNIT PRICE	#6 DEINSTALL UNIT PRICE	#7 MONTHLY MAINTENANCE UNIT PRICE
1.	8/48	NORTHERN TELECOM MERIDIAN 1 NT1 AC848	\$24,920.07	\$3,183.68	\$426.70	\$192.70
2.	16/52	NORTHERN TELECOM MERIDIAN 1 NT2 AC1652	\$28,377.68	\$3,800.79	\$426.70	\$233.99
3.	24/72	NORTHERN TELECOM MERIDIAN 1 NT3 AC2472	\$26,423.26	\$4,440.80	\$426.70	\$330.34
4.	28/88	NORTHERN TELECOM MERIDIAN 1 NT4 AC2888	\$29,293.10	\$5,364.55	\$426.70	\$399.16
5.	32/104	NORTHERN TELECOM MERIDIAN 1 NT5 AC32104	\$37,832.59	\$6,253.48	\$568.95	\$467.98
6.	40/136	NORTHERN TELECOM MERIDIAN 1 NT6 AC40136	\$42,117.09	\$6,466.83	\$568.95	\$605.64
7.	48/168	NORTHERN TELECOM MERIDIAN 1 NT7 AC48168	\$49,958.57	\$8,166.72	\$568.95	\$743.27
8.	56/200	NORTHERN TELECOM MERIDIAN 1 NT8 AC56200	\$49,014.82	\$9,660.14	\$568.95	\$880.91
9.	96/500	NORTHERN TELECOM MERIDIAN 1 NT9 AC96500	\$105,250.06	\$21,905.28	\$853.39	\$2,050.88

Price Table J.

Digital PBX Additional Equipment and Features. This table is used to provide new Additional Equipment and Features that may be ordered for digital PBX's ordered under Price Table I or for the Government-owned PBX's with which these items are compatible. It provides for the purchase, installation or move, de-installation, and monthly maintenance service of this additional equipment.

TABLE J -- DIGITAL PBX ADDITIONAL EQUIPMENT AND FEATURES

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE UNIT PRICE	#5 INSTALL OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE	#7 MONTHLY MAINTENANCE UNIT PRICE
1.	ATTENDANT CONSOLE UP TO 100 STATIONS	NTI M2250	\$2,226.79	\$106.66	\$35.55	\$3.44
2.	RESERVE POWER, UPS TYPE W/GEL FILLED BATTERIES, UP TO 250 STATIONS (6 HOUR MIN)	GNB MSB2010	\$722.91	\$284.46	\$142.23	\$12.04
3.	RESERVE POWER, UPS TYPE W/GEL FILLED BATTERIES, 251 TO 500 STATIONS (6 HOUR MIN)	GNB MSB2460	\$1,643.50	\$284.46	\$142.23	\$22.94
4.	MEET-ME CONFERENCE (MIN. 6 PARTIES)	NTI MEET-ME				
5.	LINE/STATION CARD ANALOG	NTI NT8D09	\$1,637.34	\$35.55	\$17.79	\$27.72
6.	STATION CARD DIGITAL	NTI NT8D02	\$1,637.34	\$35.55	\$17.79	\$27.72
7.	56/64 Kbps STATION CARD	NTI NT6D70	\$1,637.34	\$35.55	\$17.79	\$13.87
8.	TRUNK CARD, CO (DID)	NTI NT8D14	\$1,684.13	\$35.55	\$17.79	\$27.72
9.	TRUNK CARD, CO (DOD)	NTI NT8D14	\$1,684.13	\$35.55	\$17.79	\$13.87
10.	TRUNK CARD, E&M	NTI NT8D15	\$1,216.32	\$35.55	\$17.79	\$13.87
11.	TRUNK CARD (2 WAY)	NTI NT8D14	\$1,684.13	\$35.55	\$17.79	\$13.87
12.	TRUNK CARD (FX)	NTI NT8D14	\$1,684.13	\$35.55	\$17.79	\$27.72

TABLE J -- DIGITAL PBX ADDITIONAL EQUIPMENT AND FEATURES

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE UNIT PRICE	#5 INSTALL OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE	#7 MONTHLY MAINTENANCE UNIT PRICE
13.	T1 CARD/ASSEMBLY	NTI QPC720	\$2,105.16	\$71.11	\$17.79	\$80.88
14.	MULTI PURPOSE SERIAL DATA LINK FOR USE WITH QPC720	NTI NT6D80	\$2,105.16	\$106.66	\$17.79	\$80.88
15.	PBX REMOTE OFFICE TEST/LINE DIRECT TRUNK SELECTION CAPABILITY WITH 105 TYPE TEST LINE (i.e.3M MOD 1095,BELL CAROT)	DYNATEL 1020B	\$942.84	\$142.23	\$35.55	
16.	X.25 PACKET ASSEMBLERS/ DISASSEMBLERS (PADS)	BLACK BOX MX320A	\$270.68	\$71.11	\$17.79	\$5.78
17.	CHANNEL SERVICE UNIT	KENTROX 77965-12	\$890.32	\$71.11	\$17.79	\$15.01
18.	DICTATION ACCESS	NTI NT8D15	\$1,216.32	\$35.55	\$17.79	\$13.87
19.	MAKE NEW LINE HOT TO DEMARC OR BLDG TERMINAL	N/A		\$35.55	\$17.79	
20.	MAKE NEW TRUNK HOT TO DEMARC OR BLDG TERMINAL			\$35.55	\$17.79	
21.	CDR CAPTURING DEVICE W/SOFTWARE (256K BYTE MEMORY)	XIOX SIP-50	\$1,996.27	\$142.23	\$35.55	\$38.11
22.	105 TYPE TEST LINE (MINI-RESPONDER) (EQUIVALENT TO)	DYNATEL 1056A	\$1,556.37	\$71.11	\$35.55	
23.	ATTENDANT HEADSET	PLANTRONICS SHS176/H-51	\$184.11	\$17.79	\$3.56	\$3.17
24.	MAINTENANCE TERMINAL WITH PRINTER	ESPRIT/OKIDATA E400/184	\$733.63	\$35.55	\$8.89	\$13.87

TABLE J -- DIGITAL PBX ADDITIONAL EQUIPMENT AND FEATURES

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE UNIT PRICE	#5 INSTALL OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE	#7 MONTHLY MAINTENANCE UNIT PRICE
25.	PBX USER'S GUIDE	NTI PO704094	\$1.17			
26.	PBX ADDITIONAL FEATURES OPERATOR MANUAL	NTI PO746468	\$50.52			

Price Table K.

Fiber Optic Cable (per foot basis) and Related Items. Table K includes pricing of single mode and multimode fiber optic cable on a per foot basis, as well as associated Line Interface Units (LIU), splices, and splice closures.

To insure ordering the proper part number(s), refer to the example below:

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER / PART #	#4 UNIT PRICE 62.5/125 TIGHT BUFFER	#5 UNIT PRICE MULTIMODE 62.5/125	#6 UNIT PRICE SINGLE MODE 8.3 MICRON RODENT/LIGHT PROTECTED	#7 UNIT PRICE PURCHASE AND INSTALL LIU, SPLICE OR SPLICE CLOSURE
1.	2 FIBER PART # COL. 4 PART # COL. 5 PART # COL. 6	LUCENT TECH. LGBC-002D-LRX ATRU912L6-002 AT340H2L6-002	\$0.84	\$1.27	\$1.11	\$0.00
8.	6 LINE INTERFACE UNIT (LIU) PART # COL. 7	LUCENT TECH. 100A3 10A (6)C2000A2	\$0.00	\$0.00	\$0.00	\$166.37

Lucent Technologies Systimax Structured Cabling Systems. Lucent Technologies Systimax Structured Cabling Systems are available through this price schedule at no additional cost to the government. The Systimax Structured Cabling Systems provide a Lucent Technologies (formerly AT&T) 15-year warranty on cabling systems which are designed and installed using Lucent Technologies Systimax components throughout.

Should you elect to use Systimax Structured Cabling Systems, please contact the Black Box Engineering Department to ensure that your selection and design conform to Systimax requirements before you place your order.

Black Box Engineering Department: Name: Rick Robinson
Phone: 1-800-766-POTS

TABLE K -- PURCHASE AND INSTALL FIBER OPTIC CABLE (PER FOOT BASIS) AND RELATED ITEMS

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NO.	#4 UNIT PRICE MULTIMODE 62.5/125 TIGHT BUFFER	#5 UNIT PRICE MULTIMODE 62.5/125 LOOSE TUBE	#6 UNIT PRICE SINGLE MODE 8.3 MICRON RODENT/LIGHT PROTECTED	#7 UNIT PRICE PURCHASE AND INSTALL LIU,SPLICE OR SPLICE CLOSURE
1.	2 FIBER PART # COLUMN 4 PART # COLUMN 5 PART # COLUMN 6	LUCENT TECH. LGBC-002D-LRX ATRU912L6-002 AT340H2L6-002	NORDX/CDT R0116410 NTF-CMGO-02 NX-CWRA-02	\$0.96	\$1.46	\$1.28
2.	4 FIBER PART # COLUMN 4 PART # COLUMN 5 PART # COLUMN 6	LUCENT TECH. LGBC-004D-LRX ATRU912L6-004 AT340H2L6-004	NORDX/CDT R0116411 R0116934 RX100030	\$1.31	\$1.77	\$1.33
3.	6 FIBER PART # COLUMN 4 PART # COLUMN 5 PART # COLUMN 6	LUCENT TECH. LGBC-006D-LRX ATRU912L6-006 AT340H2L6-006	NORDX/CDT R0116438 R0116935 RX100031	\$2.10	\$2.33	\$1.59
4.	12 FIBER PART # COLUMN 4 PART # COLUMN 5 PART # COLUMN 6	LUCENT TECH. LGBC-012D-LRX ATRU912L6-012 AT340H2L6-012	NORDX/CDT R0116440 R0116937 RX100033	\$3.07	\$3.32	\$1.83
5.	18 FIBER PART # COLUMN 4 PART # COLUMN 5 PART # COLUMN 6	LUCENT TECH. LGBC-018D-LRX ATRU912L6-018 AT340H2L6-018	NORDX/CDT NTF-DMGR-18 R0116938 RX100034	\$3.85	\$3.77	\$1.75
6.	24 FIBER PART # COLUMN 4 PART # COLUMN 5	LUCENT TECH. LGBC-024D-LRX ATRU912L6-024	NORDX/CDT R0116441 R0116939	\$5.78	\$5.28	\$2.31

TABLE K -- PURCHASE AND INSTALL FIBER OPTIC CABLE (PER FOOT BASIS) AND RELATED ITEMS

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NO.	#4 UNIT PRICE MULTIMODE 62.5/125 TIGHT BUFFER	#5 UNIT PRICE MULTIMODE 62.5/125 LOOSE TUBE	#6 UNIT PRICE SINGLE MODE 8.3 MICRON RODENT/LIGHT PROTECTED	#7 UNIT PRICE PURCHASE AND INSTALL LIU,SPLICE OR SPLICE CLOSURE
	PART # COLUMN 6	AT340H2L6-024	RX100035			
7.	6 LINE INTERFACE UNIT (LIU) PART # COLUMN 7	LUCENT TECH. 100A3 10A (6) C2000A2	NORDX/CDT AX100495 AX100088			\$190.83
8.	12 LINE INTERFACE UNIT (LIU) PART # COLUMN 7	LUCENT TECH. 100A3 (2) 10A (12) C2000A2	NORDX/CDT AX100495 (2) AX100088			\$241.82
9.	18 LINE INTERFACE UNIT (LIU) PART # COLUMN 7	LUCENT TECH. 200A (3) 1000ST (18) C2000A2	NORDX/CDT AX100495 (2) AX100080			\$359.81
10.	24 LINE INTERFACE UNIT (LIU) PART # COLUMN 7	LUCENT TECH. 200A (4) 1000ST (24) C2000A2	NORDX/CDT AX100495 (2) AX100080			\$410.79
11.	FIBER OPTIC CLOSURE PART # COLUMN 7	LUCENT TECH. UCB-1				\$1,676.47
12.	ST CONNECTOR MM PART # COLUMN 7	LUCENT TECH. P2020C-C-125	NORDX/CDT A0408837			\$53.91

TABLE K -- PURCHASE AND INSTALL FIBER OPTIC CABLE (PER FOOT BASIS) AND RELATED ITEMS

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NO.		#4 UNIT PRICE MULTIMODE 62.5/125 TIGHT BUFFER	#5 UNIT PRICE MULTIMODE 62.5/125 LOOSE TUBE	#6 UNIT PRICE SINGLE MODE 8.3 MICRON RODENT/LIGHT PROTECTED	#7 UNIT PRICE PURCHASE AND INSTALL LIU,SPLICE OR SPLICE CLOSURE
13.	ST CONNECTOR SM PART # COLUMN 7	LUCENT TECH. P3020A-Z-125					\$53.96
14	8 FIBER PART # COLUMN 4 PART # COLUMN 5 PART # COLUMN 6	LUCENT TECH. LGBC-008D-LRX ATRU912L6-008 AT340H2L6-008	NORDX/CDT R0116439 R0116936 RX100032	\$2.21	\$2.43	\$1.53	
15	SC CONNECTOR MM INSTALLED	AVAYA 700-007-024					\$68.10 X
16	SC CONNECTOR SM INSTALLED	AVAYA 700-006-976					\$87.03 X
17	DUPLEX FIBER OPTIC PATCH CORD DUPLEX ST/ST-MM 1 METER	BLACK BOX EFN062-001M-CC		\$25.42			X
18	DUPLEX FIBER OPTIC PATCH CORD DUPLEX ST/ST-MM 3 METER	BLACK BOX EFN062-003M-CC		\$28.32			X
19	DUPLEX FIBER OPTIC PATCH CORD DUPLEX ST/ST-MM 10 METER	BLACK BOX EFN062-010M-CC		\$38.62			X
20	DUPLEX FIBER OPTIC PATCH CORD	BLACK BOX EFN4025-001M		\$35.28			X

TABLE K -- PURCHASE AND INSTALL FIBER OPTIC CABLE (PER FOOT BASIS) AND RELATED ITEMS

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NO.	#4 UNIT PRICE MULTIMODE 62.5/125 TIGHT BUFFER	#5 UNIT PRICE MULTIMODE 62.5/125 LOOSE TUBE	#6 UNIT PRICE SINGLE MODE 8.3 MICRON RODENT/LIGHT PROTECTED	#7 UNIT PRICE PURCHASE AND INSTALL LIU,SPLICE OR SPLICE CLOSURE
	DUPLEX SC/SC-MM 1 METER					
21	DUPLEX FIBER OPTIC PATCH CORD DUPLEX SC/SC-MM 3 METER	BLACK BOX EFN4025-003M	\$38.52			X
22	DUPLEX FIBER OPTIC PATCH CORD DUPLEX SC/SC-MM 10 METER	BLACK BOX EFN4025-010M	\$68.98			X
23	DUPLEX FIBER OPTIC PATCH CORD DUPLEX ST/ST-SM 1 METER	BLACK BOX EFN5009-001M	\$42.64			X
24	DUPLEX FIBER OPTIC PATCH CORD DUPLEX ST/ST-SM 3 METER	BLACK BOX EFN5009-003M	\$44.68			X
25	DUPLEX FIBER OPTIC PATCH CORD DUPLEX ST/ST-SM 10 METER	BLACK BOX EFN5009-010M	\$51.88			X
26	DUPLEX FIBER OPTIC PATCH CORD DUPLEX SC/SC-SM 1 METER	BLACK BOX EFN5010-001M	\$44.62			X
27	DUPLEX FIBER OPTIC PATCH CORD	BLACK BOX EFN5010-003M	\$46.68			X

TABLE K -- PURCHASE AND INSTALL FIBER OPTIC CABLE (PER FOOT BASIS) AND RELATED ITEMS

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NO.		#4 UNIT PRICE MULTIMODE 62.5/125 TIGHT BUFFER	#5 UNIT PRICE MULTIMODE 62.5/125 LOOSE TUBE	#6 UNIT PRICE SINGLE MODE 8.3 MICRON RODENT/LIGHT PROTECTED	#7 UNIT PRICE PURCHASE AND INSTALL LIU,SPLICE OR SPLICE CLOSURE
	DUPLEX SC/SC-SM 3 METER						
28	DUPLEX FIBER OPTIC PATCH CORD DUPLEX SC/SC-SM 10 METER	BLACK BOX EFN5010-010M		\$53.88			X
29	1" INNERDUCT PVC PER FOOT, INSTALLED	CARLON DF4X12					\$2.42 X
30	1" INNERDUCT PLENUM PER FOOT, INSTALLED	CARLON CF4X1C					\$4.30 X
31	1-1/4" INNERDUCT PVC PER FOOT, INSTALLED	BLACK BOX JPD002					\$2.72 X
32	1-1/4" INNERDUCT PLENUM PER FOOT, INSTALLED	BLACK BOX JPD001					\$4.62 X

Price Table L.

Voice Mail System(s). Table L includes voice mail systems from two manufacturers, Octel (Items 1-18) and the newly added Key Voice Systems (Items 19-104). System accessories for expanded capacity and PBX integration are included for both manufacturers' products.

An explanation of the added Key Voice, voice mail products is included here.

Items 19-30: Corporate Office Complete Systems. Automated Attendant, Voice Mail with up to 10,000 boxes. These systems include a PC with 3.5" diskette drive, 60 or 125 hours voice storage, keyboard, VGA monochrome monitor, DOS 6.2, 1 parallel port, 1 serial port, voice board(s), Key Voice Software and literature.

Items 35-39: Corporate Office Special Integrations. Discontinued

Items 40-43: Small Office Systems. Automated Attendant, Voice Mail with up to 100 boxes. These systems include a PC with 3.5" diskette drive, 60 hours voice storage, VGA card, DOS 6.2, Key Voice and Key Link software and literature. Keyboard and monitor not included.

Items 44-59: Corporate Office Interchange. Automated Attendant, Voice Mail systems with up to 10,000 boxes, includes a PC with 3.5" diskette drive, 100 or 160 hours voice storage, Windows Based OS, keyboard, monitor, voice board(s), Key Voice software and literature.

Items 67-69: Discontinued.

Items 70-75: Expansion Components. Includes 4-port expansion cards (DOS and NT systems), NT Software expansion License Fee.

Items 76-81: Special Integration Devices. Includes integration devices that may be required to interface with various PBXs.

Items 82-91: Options for Corporate NT and Small Office NT Systems. Includes software for Visual Call Management, Unified Messaging, E-mail Reader, Fax Mail, IVR and others.

Items 92-95: Optional Hardware available for Complete Systems. Includes Fax boards.

Items 96-99: Discontinued

Items 100-104: Key Voice Printed Material. Installation and User Guides.

TABLE L -- VOICE MAIL SYSTEM(S)

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE NEW UNIT PRICE	#5 INSTALL, OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE	#7 MAINTENANCE MONTHLY UNIT PRICE
1.	VOICE MAIL, 10 TO 20 USERS 2.5 HOURS	OCTEL OCTEL-001	\$4,217.98	\$1,379.99	\$71.11	\$24.08
2.	VOICE MAIL, 20 TO 50 USERS 6.0 HOURS	OCTEL-002	\$6,302.19	\$1,930.56	\$71.11	\$41.29
3.	VOICE MAIL, 50 TO 100 USERS 6.0 HOURS	OCTEL OCTEL-003	\$16,189.95	\$3,793.31	\$71.11	\$99.50
4.	VOICE MAIL, 100 TO 200 USERS 12.5 HOURS	OCTEL OCTEL-004	\$23,893.68	\$3,793.31	\$71.11	\$99.50
5.	VOICE MAIL, 200 TO 250 USERS 32.5 HOURS	OCTEL OCTEL-005	\$24,985.41	\$3,793.31	\$71.11	\$99.50
6.	VOICE MAIL, 250 TO 500 USERS 32.5 HOURS	OCTEL OCTEL-006	\$35,555.20	\$3,793.31	\$71.11	\$99.50
7.	2 PORT LINE CARD	OCTEL 200-0061-001	\$1,139.86	\$344.11	\$35.55	\$9.18
8.	4 PORT LINE CARD	OCTEL 300-6002-001	\$4,321.97	\$344.11	\$35.55	\$24.39
9.	8 PORT LINE CARD	OCTEL 300-6032-001	\$8,548.94	\$344.11	\$35.55	\$51.62
10.	HOURS OF STORAGE 2.5 HOURS	OCTEL 726-0130-004	\$848.83	\$344.11	\$35.55	\$6.89
11.	HOURS OF STORAGE 6.0 HOURS	OCTEL 726-0132-004	\$1,485.46	\$344.11	\$35.55	\$14.92
12.	HOURS OF STORAGE 11.0 HOURS	OCTEL 740-6632-002	\$3,962.73	\$344.11	\$35.55	\$27.53
13.	AT&T SYS 75/85 DEF 1 & 2 INTEGRATION HARDWARE	OCTEL 300-6018-001 300-6035-001	\$1,424.83	\$573.52	\$35.55	\$8.60
14.	NORTHERN TELECOM MERIDIAN 1 INTEGRATION HARDWARE	OCTEL 740-6129-001 or 300-6009-001	\$1,424.83	\$458.81	\$35.55	\$8.60
15.	ROLM 8000/9000/IBM 9751 INTEGRATION HARDWARE	OCTEL 300-6025-001	\$1,424.83	\$458.81	\$35.55	\$8.60
16.	HITACHI 5000 INTEGRATION HARDWARE	OCTEL SW-40031B	\$474.94	\$573.52	\$35.55	\$2.86
17.	INTECOM IBX S-10 INTEGRATION HARDWARE	OCTEL SW-40031B	\$474.94	\$573.52	\$35.55	\$2.86
18.	NEC 2400 IMS/ICS INTEGRATION HARDWARE	OCTEL SW-40031B	\$474.94	\$573.52	\$35.55	\$2.86

TABLE L -- VOICE MAIL SYSTEM(S)

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE NEW UNIT PRICE	#5 INSTALL, OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE	#7 MAINTENANCE MONTHLY UNIT PRICE	
	<u>KEY VOICE Corporate Office Complete</u>						
19.	4 PORT 60 HOUR STANDARD PLATFORM STANDARD INTEGR.	KEY VOICE CPC3DXD-A	\$4,044.15	\$564.52	\$94.09	\$20.91	X
20.	8 PORT 60 HOUR STANDARD PLATFORM STANDARD INTEGRATION REQUIRES 1 EACH ITEM #22	KEY VOICE CPC3DXD-A	\$5,466.19	\$940.87	\$94.09	\$31.36	X
21.	12 PORT 60 HOUR STANDARD PLATFORM STANDARD INTEGRATION REQUIRES 2 EACH ITEM #22	KEY VOICE CPC3DXD-A	\$6,892.92	\$1,317.22	\$141.13	\$47.04	X
22.	4 PORT EXPANSION BOARD STANDARD INTEGRATION	KEY VOICE CRET432	\$1,514.00	\$282.26	\$94.09	\$5.10	X
23.	RESERVED						X
24.	RESERVED						X
25.	RESERVED						X
26.	RESERVED						X
27.	4 PORT 60 HOUR STANDARD PLATFORM KVT/KEY VOICE IVPC DIGITAL INTGRATION	KEY VOICE CPC3DX-IVP	\$4,044.15	\$564.52	\$94.09	\$20.91	X
28.	8 PORT 60 HOUR STANDARD PLATFORM KVT/KEY VOICE IVPC DIGITAL INTGRATION REQUIRES 1 EACH ITEM #30	KEY VOICE CPC3DX-IVP	\$5,466.19	\$940.87	\$94.09	\$31.36	X
29.	12 PORT 60 HOUR STANDARD PLATFORM KVT/KEY VOICE IVPC DIGITAL INTGRATION REQUIRES 2 EACH ITEM #30	KEY VOICE CPC3DX-IVP	\$6,892.92	\$1,317.22	\$141.13	\$47.04	X
30.	4 PORT EXPANSION BOARD DIGITAL INTEGRATION	KEY VOICE IVPC	\$1,423.92	\$282.26	\$94.09	\$4.18	X
31.	RESERVED						X
32.	RESERVED						X
33.	RESERVED						X
34.	RESERVED						X
35.	RESERVED						X
36.	RESERVED						X

TABLE L -- VOICE MAIL SYSTEM(S)

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE NEW UNIT PRICE	#5 INSTALL, OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE	#7 MAINTENANCE MONTHLY UNIT PRICE	
37.	RESERVED						X
38.	RESERVED						X
39.	RESERVED						X
	<u>KEY VOICE Small Office Systems</u>						
40.	SMALL OFFICE PLUS 4 PORT 60 HOURS COMPLETE SYSTEM	KEY VOICE CVSOC4D-A	\$2,853.48	\$564.52	\$94.09	\$20.91	X
41.	SMALL OFFICE PLUS KVT/KEY VOICE IVPC 4 PORT 60 HOURS COMPLETE SYSTEM	KEY VOICE CVSOC4-IVP	\$2,853.48	\$564.52	\$94.09	\$20.91	X
42.	UPGRADE TO CORPORATE OFFICE	KEY VOICE VSOP	\$947.08	\$188.17			
43.	MONITOR AND KEYBOARD	KEY VOICE MONITOR	\$356.45	\$94.09	\$47.04	\$4.18	
	<u>KEY VOICE Corporate Office Interchange</u>						
44.	4 PORT WINDOWS BASED STANDARD INT 100 HOURS MESSAGE STORAGE	KEY VOICE WBEPDI4-4 (TOWE WBERDI4-4 (RACK)	\$5,920.00	\$658.61	\$94.09	\$31.36	X
45.	8 PORT WINDOWS BASED STANDARD INT 100 HOURS MESSAGE STORAGE	KEY VOICE WBEPDI4-8 (TOWE WBERDI4-8 (RACK)	\$7,784.00	\$1,034.96	\$94.09	\$47.04	X
46.	12 PORT WINDOWS BASED STANDARD INT 100 HOURS MESSAGE STORAGE	KEY VOICE WBEPDI4-12(TOWE WBERDI4-12 (RACK)	\$9,805.00	\$1,411.31	\$141.13	\$67.95	X
47.	16 PORT WINDOWS BASED STANDARD INT 100 HOURS MESSAGE STORAGE	KEY VOICE WBEPDI4-16(TOWE WBERDI4-16 (RACK)	\$14,945.00	\$1,787.66	\$141.13	\$78.41	X
48.	20 PORT WINDOWS BASED STANDARD INT 100 HOURS MESSAGE STORAGE	KEY VOICE WBLSC4-20	\$17,378.56	\$2,164.01	\$188.17	\$83.63	X
49.	24 PORT WINDOWS BASED STANDARD INT 160 HOURS MESSAGE STORAGE	KEY VOICE WBLSC4-24	\$21,998.30	\$2,540.36	\$188.17	\$94.09	X
50.	28 PORT WINDOWS BASED STANDARD INT 160 HOURS MESSAGE STORAGE	KEY VOICE WBLSC4-28	\$23,660.16	\$2,916.71	\$235.22	\$109.77	X
51.	32 PORT WINDOWS BASED STANDARD INT 160 HOURS MESSAGE STORAGE	KEY VOICE WBLSC4-32	\$28,078.63	\$3,293.06	\$235.22	\$125.45	X
52.	36 PORT WINDOWS BASED STANDARD INT 160 HOURS MESSAGE STORAGE	KEY VOICE WBLSC4-36	\$29,741.43	\$3,669.41	\$282.26	\$125.45	X
53.	40 PORT WINDOWS BASED STANDARD INT 160 HOURS MESSAGE STORAGE	KEY VOICE WBLSC4-40	\$32,594.91	\$4,045.76	\$282.26	\$130.68	X
54.	44 PORT WINDOWS BASED STANDARD INT	KEY VOICE	\$34,279.34	\$4,422.11	\$329.31	\$130.68	X

TABLE L -- VOICE MAIL SYSTEM(S)

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE NEW UNIT PRICE	#5 INSTALL, OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE	#7 MAINTENANCE MONTHLY UNIT PRICE	
	160 HOURS MESSAGE STORAGE	WBLSC4-44					
55.	48 PORT WINDOWS BASED STANDARD IN 160 HOURS MESSAGE STORAGE	KEY VOICE WBLSC4-48	\$38,676.18	\$4,798.46	\$329.31	\$130.68	X
56.	52 PORT WINDOWS BASED STANDARD IN 160 HOURS MESSAGE STORAGE	KEY VOICE WBLSC4-52	\$40,338.99	\$5,174.81	\$376.35	\$130.68	X
57.	56 PORT WINDOWS BASED STANDARD IN 160 HOURS MESSAGE STORAGE	KEY VOICE WBLSC4-56	\$41,998.03	\$5,551.16	\$376.35	\$130.68	X
58.	60 PORT WINDOWS BASED STANDARD IN 160 HOURS MESSAGE STORAGE	KEY VOICE WBLSC4-60	\$43,660.83	\$5,927.51	\$376.35	\$130.68	X
59.	64 PORT WINDOWS BASED STANDARD IN 160 HOURS MESSAGE STORAGE	KEY VOICE WBLSC4-64	\$45,699.84	\$6,303.86	\$376.35	\$130.68	X
60.	RESERVED						X
61.	RESERVED						X
62.	RESERVED						X
63.	RESERVED						X
64.	NT SOFTWARE EXPANSION PORT LICENSE FEE APPLD AT 16, 32 & 48 PTS	KEY VOICE NTLICENSE	\$2,382.29				
65.	RESERVED						X
66.	RESERVED						X
	<u>KEY VOICE Small Office NT</u>						
67.	RESERVED						X
68.	RESERVED						X
69.	RESERVED						X
	<u>Expansion Components</u>						
70.	DIALOGIC DIALOG/4 SYSTEM 4 PORT EXPANSION STANDARD INTEGRATION	KEY VOICE CDIAL04	\$1,423.92	\$282.26	\$94.09	\$4.18	X
71.	RESERVED						X
72.	DIALOGIC D41H NT SYSTEM 4 PORT (PORT LICENSING FEE MAY APPLY)	KEY VOICE DIALEXD41H	\$1,661.86	\$282.26	\$94.09	\$4.18	

TABLE L -- VOICE MAIL SYSTEM(S)

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE NEW UNIT PRICE	#5 INSTALL, OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE	#7 MAINTENANCE MONTHLY UNIT PRICE	
73.	RESERVED						X
74.	IVPC SYSTEM 4 PORT EXPANSION KEY VOICE DIGITAL INTEGRATION	KEY VOICE IVPC	\$1,423.92	\$282.26	\$94.09	\$4.18	X
75.	NT SOFTWARE EXPANSION PORT LICENSE FEE APPLIED AT 16, 32, 48 PTS	KEY VOICE NTLICENSE	\$2,382.29				
	<u>Special Integration Devices</u>						
76.	SMDI FOR CENTREX	KEY VOICE SMDI001	\$589.69	\$658.61	\$188.17	\$4.18	
77.	SMDI INTEGRATION FOR NEC 2400	KEY VOICE SMDI802	\$589.69	\$658.61	\$188.17	\$4.18	
78.	VOICE BRIDGE FOR NORTHERN TELECOM SL-1	KEY VOICE SMDI203	\$4,758.93	\$3,010.80	\$188.17	\$41.82	
79.	CALISTA 4X4 FOR NORSTAR, MITEL, ROLM AND LUCENT	KEY VOICE CAL4X4	\$1,661.86	\$1,505.40	\$188.17	\$20.91	
80.	CALISTA INTEGRATION DEVICE FOR NORTHERN MERIDIAN 1 OR AT&T G3	KEY VOICE SMDI208	\$3,568.26	\$1,505.40	\$188.17	\$20.91	
81.	SMDI INTEGR. FOR MERIDIAN 1 SYSTEM ABOVE 24 PORTS USING A CALISTA 2 PORT BOX. REQUIRES 1 ISA SLOT.	KEY VOICE SMDI210	\$2,375.70	\$376.35	\$94.09	\$20.91	
	<u>Options for Corporate & Small Office NT</u>						
82.	VISUAL CALL MANAGEMENT (VCM) 50 USER LICENSE DESKTOP	KEY VOICE NTVCM	\$1,781.31	\$1,129.05	\$94.09	\$12.54	
83.	UNIFIED MESSAGING 50 USER LICENSE	KEY VOICE CUNIFIED	\$2,971.98	\$1,505.40	\$94.09	\$12.54	X
84.	RESERVED						X
85.	RESERVED						X
86.	PER SESSION E-MAIL READER	KEY VOICE EMAIL2-LH	\$595.34	\$376.35	\$94.09	\$12.54	X
87.	INTERACTIVE VOICE RESPONSE (IVR)	KEY VOICE IVR001	\$1,185.03	\$752.70	\$94.09	\$12.54	
88.	FAX RETRIEVAL SOFTWARE (DOES NOT INCLUDE NECESSARY HARDWARE)	KEY VOICE CAF0001	\$470.25	\$376.35	\$94.09	\$12.54	
89.	FAX MAIL/FAX RETRIEVAL SOFTWARE (DOESN'T INCLUDE NEC. HARDWARE)	KEY VOICE CFM0004-A	\$827.64	\$376.35	\$94.09	\$12.54	
90.	OPTIONS KIT: FAX MAIL/DISTRIBUTION, TALKING CLASS, TELEMARKETING S/W	KEY VOICE OPTKIT	\$1,185.03	\$752.70	\$94.09	\$12.54	

TABLE L -- VOICE MAIL SYSTEM(S)

#1 ITEM NO.	#2 ITEM	#3 MANUFACTURER/ MANUFACTURER'S PART NUMBER	#4 PURCHASE NEW UNIT PRICE	#5 INSTALL, OR MOVE UNIT PRICE	#6 DEINSTALL UNIT PRICE	#7 MAINTENANCE MONTHLY UNIT PRICE
	<u>Options for Corporate & Small Office</u>					
91.	TELESEARCH TALKING CLASSIFIEDS SOFTWARE	KEY VOICE CL0002-A	\$351.75	\$282.26	\$94.09	\$12.54
	<u>Optional Hardware For Complete Systems</u>					
92.	GAMMALINK 1 PORT FAX BOARD	KEY VOICE CGAMMA	\$827.64	\$188.17	\$94.09	\$4.18 X
93.	GAMMALINK 2 PORT FAX BOARD	KEY VOICE CGAMMA-2	\$1,781.31	\$188.17	\$94.09	\$4.18 X
94.	GAMMALINK 4 PORT FAX BOARD	KEY VOICE CGAMMA-4	\$2,853.48	\$188.17	\$94.09	\$4.18 X
95.	RESERVED					X
	<u>Large Scale Chassis</u>					
96.	RESERVED					X
97.	RESERVED					X
98.	RESERVED					X
99.	RESERVED					X
	<u>Key Voice Printed Material</u>					
100.	KEY VOICE INSTALLATION GUIDE	KEY VOICE MAN003	\$59.25			
101.	KEY VOICE SUPERVISOR'S GUIDE	KEY VOICE MAN002	\$18.81			
102.	KEY VOICE DEBUT AND LITE SYSTEM SETUP & SUPERVISOR'S GUIDE	KEY VOICE MAN004	\$18.81			
103.	KEY VOICE USER GUIDES PACKAGE OF 10	KEY VOICE POCKET	\$13.17			
104.	KEY VOICE TRI FOLD USER GUIDES PACKAGE OF 50	KEY VOICE TRI-FOLD	\$13.17			

Appendix 4 - ORDERING EXAMPLES

1. Ordering Examples. This appendix includes examples of how to place various types of orders. Any authorized agency procurement document may be used. All purchase orders must cite the GSA Contract number for the contract you are using (provided on the cover page). An agency may issue purchase orders directly to the Contractor. The purchase order should indicate the TABLE, item number, description, manufacturer's part number, and price. It should also indicate the action required for each item (purchase, install, de-install or maintain).

Some examples of different types of orders are contained in the following pages. It would not be feasible to include a sample of every type of situation. Samples included are those that are commonplace. Should questions arise concerning an order, you should contact the COTR for assistance (See Appendix 8).

2. Replacing Leased Telephones. When purchasing telephones to replace leased telephones you should issue separate disconnect orders (via standard form 145) directly to the company leasing the phones to you.

3. Line Orders. Although telephone equipment and related services such as equipment installation are ordered from the Contractor, line service is ordered through GSA for customers who are GSA consolidated systems users.

EXAMPLE 1

SITUATION: The Small Business Administration (SBA) has an office of six people and is served from GSA by six Centrex station lines which extend to a jack located at each work station. SBA has a need to replace six single line instruments.

PLANNING:

1. Are the required items available on the POTS contract?
2. Is there a requirement for de-installation and installation?

The items are modular, and a jack is available. SBA personnel can disconnect the old and connect the new phones.

3. Is there a need for a maintenance contract?

Not for the first year because the equipment carries a one year warranty. Subsequent to the first year, SBA should determine if it is cheaper to buy a new phone or order maintenance. Maintenance contracts are to run from fiscal year to fiscal year and must be placed on a separate order.

ACTIONS:

1. The SBA issues a purchase order to the POTS Contractor for six single line instruments.
2. The instruments' pricing is available on Table A of the contract.

EXAMPLE 2

SITUATION: The IRS is currently being served by a key system on an off premises basis by GSA. The key system is served by eight OPX Centrex lines from GSA. There are currently nine 10-button sets with two intercom paths being used. IRS has decided to replace this key system with like services using the POTS contract. Due to joint use of common equipment, IRS has determined that the key service equipment must be located within its existing space, requiring re-cabling of the facility. No new 1A2 Key System is available on the contract, so the IRS has opted to purchase a Digital Electronic Key System.

PLANNING:

1. The 10-button sets will be required. They must also have installation. Order from Price Table A.
2. A Key Service Unit (KSU) and installation is required. Nearest compatible configuration is 8/18/2 on Price Table C, Item 17 (Digital Key System KSU).
3. Wiring will be required to connect the KSU to the instruments. The IRS determines that Level 3 Plenum cable is desirable. Use Price Table H.
4. Maintenance is not required due to the one-year warranty. After the one-year warranty, maintenance should be ordered.

ACTIONS:

1. This equipment replacement will require the use of multiple tables under the POTS contract. Since there is no anticipated change in line service, no order is required to GSA.
2. IRS would order equipment and services directly from the POTS vendor using the contract schedule as follows:
 - a. Order nine 10-button sets and installation from Table A, Item 21, Digital Key System 10-button phone.
 - b. Order an 8/20 configuration - key service and installation unit from Table C.
 - c. Order flat rate wiring for Level 3 Plenum for connection of KSU from Table H.
 - d. Issue disconnect orders to the LEC to disconnect all billed items.

EXAMPLE 3

SITUATION: GSA's Federal Supply Service (FSS) has the following station equipment on which the one-year warranty has expired:

- ten single line instruments
- twelve six-button sets
- three 10-button call directors

PLANNING:

1. The communications manager thinks that the ten single line instruments can be replaced more cheaply than the price of maintenance.
2. This manager also realizes that the other items are of sufficient complexity and value to make maintenance cost effective.
3. The manager also realizes that maintenance must be ordered separately, on a fiscal year basis.

ACTIONS:

1. Review Table A for cost of single line maintenance versus instrument cost. It is cheaper to buy new instruments when they break.
2. Using Table A, order maintenance for the remaining equipment for the remainder of the fiscal year.

EXAMPLE 4

SITUATION: The Highway Administration is moving from room 12A15 to 10B12, within the Federal Building. Affected equipment consists of eight single line touch-tone instruments.

PLANNING:

1. Should de-install, move and reinstall, or relocation be used?
2. Are lines available in the new office? If not, move current lines.

ACTIONS:

1. Use SF-145 to move line services.
2. Use SF-300 to move single line instruments.

EXAMPLE 5

SITUATION: The U. S. Marine Corps Reserve in Abilene, TX, has determined that it needs to replace its existing key systems with a new electronic key system. Their present system consists of six lines and 16 instruments, however, they anticipate the new service will be for 20 instruments with eight lines.

PLANNING:

1. What system will be the most effective replacement of the current system?
2. Are any special functions required to make the replacement?
3. What is required to satisfy current and projected needs?
4. Are there any telecommunications procurements by others that would be beneficial to this agency and might allow for this agency's use instead of this current planned purchase?
5. Is there a need for replacement of wiring?

ACTIONS:

1. Use Table C to satisfy the configuration needs.
2. Use Table A to procure 20 10-button sets.
3. Use Table H to procure the wiring for the EKS.

APPENDIX 5 - ORDERING INFORMATION

1. Ordering Information. This appendix summarizes ordering and payment information.

2. Accurate Purchase Orders. It is important that you fill out each purchase order completely and accurately. If possible, discuss the purchase order with the Contractor verbally before you send it to them to reduce the possibility of omissions that could result in delivery and installation delays.

NOTE: If you question the requirement for a particular item or service, you may call the GSA Contracting Officer for clarification (numbers are listed in Appendix 8); however it is ultimately the responsibility of each agency to decide what items to purchase. Submit purchase orders to the following address:

**Black Box Network Services, Inc. - Government Solutions
1010 Haley Road
Murfreesboro, Tennessee 37129**

or you may **fax** your purchase order to **(615) 890-2179** and follow up with a hard copy in the mail.

For information, or to reach a Contractor account representative, call:

1-800-766-POTS

3. Type of Purchase Order. You may use any valid agency-obligating document as a purchase order. You also have the option of entering into blanket purchase agreements (BPA's) or basic ordering agreements (BOA's) with the Contractor.

4. Shipping. The Contractor is responsible for the initial shipping of purchased items. Agencies are responsible for subsequent shipping.

5. Line Orders and Centrex Features. Continue to order line service (to add or change lines and numbers or to change optional Centrex features such as call forwarding) through GSA.

Line Service Time Frames: Allow 15 working days (for up to 15 lines). Over 15 lines: dates are negotiated with the local telephone company. Call GSA to confirm the service date for line orders. Send Standard Form 145 to:

North Carolina:	BOB BARRON GSA - Area Telecommunications Office 4TTO-RL 110 W. Glenn St. Zebulon, NC 27597-2324 (919) 269-5237
South Carolina:	FAYE DUFFIE

GSA – FTS ATM OFFICE 4TTO-CO
1835 Assembly St., Room 171
Columbia, SC 29201-3006

Florida: **GLEND TYSE**
GSA - Area Telecommunications Office 4TTO-FL
6773 Miramar Parkway
Miramar, FL 33023-4874
(954) 893-7700

Alabama / Mississippi: **BARBARA DRANSFIELD**
GSA - Area Telecommunications Office 4TTO-MO
109 St. Joseph St., Room 2022
Mobile, AL 36602-3630
(334) 690-2000

Georgia: **DANA HALL**
77 Forsythe Street, SW, 7th Floor
Atlanta, GA 30303

Kentucky and Tennessee: **MICKEY LYLES**
1231 Siloam Church Road
Westmoreland, TN 37186

6. Completion Notices. After the Contractor completes work on an order they are required to notify you verbally and furnish a written completion within five working days.

7. Invoices. The Contractor is required to mail an original invoice, plus one copy, at the end of each month in which charges occurred, to the agency billing office indicated on the purchase order. Invoices will show the agency order number, type and location of equipment, any service charges, subtotals by order number, schedule items, and a grand total. Past due charges and/or credits (arrears) from previous invoices will be separately identified.

8. Payment Due Date. Payments are due 30 calendar days after the last billing date indicated on the invoice, in accordance with the Prompt Payment Act.

Late Invoices: If your agency receives a “late” invoice from the Contractor, 10 calendar days will be added to the payment deadline for each late month. For example, if you received May, June, and July invoices in August, the 30 day payment deadline would be extended by 10 calendar days for June’s invoice and 20 calendar days for May’s invoice.

9. Payment Address: Send payments to:
Black Box Network Services, Inc. - Government Solutions

**1010 Haley Road
Murfreesboro, Tennessee 37129**

10. Ordering Cycle for Equipment. The following is the ordering cycle for equipment and related services, such as installation:

- The agency sends purchase order to the Contractor.
- The Contractor performs the work and sends completion notice to the agency.
- The agency compares the completion notice with the pending purchase order.
- The Contractor bills the agency.
- The agency verifies and reconciles the invoice.
- The agency pays the Contractor.
- The agency updates its inventory.

11. Ordering Cycle for Lines. The following is the ordering cycle for lines and related services, such as Centrex features:

- The agency prepares and forwards SF 145 to GSA.
- GSA issues work order to local telephone company.
- The local telephone company performs work and provides a completion notice to GSA.
- GSA updates line inventory and bills the agency.
- The agency verifies and reconciles invoice with GSA.
- The agency pays GSA.
- The agency updates its inventory.

APPENDIX 6 - COORDINATING INSTALLATION

1. Coordinating Installation. When you order installation of POTS contract equipment, you must ensure that any line-related services ordered through GSA from the local exchange company are properly scheduled as well. To help meet schedules, you may require the Contractor to act in your behalf to locate and identify telephone company lines, to connect equipment, and to coordinate with the telephone company to ensure that both equipment and dial tone function as a unit. Submit a "Letter of Agency" to the Contractor (see sample below).

SAMPLE LETTER OF AGENCY

TO: (Local exchange company or applicable entity)

This letter is to advise you that this organization has retained the services of (insert name of Contractor's company) to provide telephone equipment and services to our offices at (fill in location where services are to be provided).

(Name of Contractor) is authorized to act in our behalf for the necessary coordination of line installation with Government equipment, trouble reporting and repair, and in obtaining the necessary information concerning services supplied. The ordering of lines, line features, moves, or de-installation of line will continue to be ordered from you by this agency through the General Services Administration. (Name of Contractor) shall not be furnished any services that would obligate this agency or the General Services Administration financially.

This authorization does not preclude our ability nor that of the General Services Administration to act in our own behalf when we deem it necessary and shall remain in effect until further notice.

Your contact at (Name of Contractor) is (fill in name of the Contractor's representative) whose phone number is (fill in Contractor representative's phone number).

Signature and title of agency representative.

cc: the Contractor
local GSA Telecommunications Field Office

NOTE: Ensure that you use the Contractor's name as shown on the contract.

2. Coordinating Line Orders: Each agency is required to order line services through GSA Standard Form 145 and furnish the Contractor with the order numbers (obtained from GSA). Include the location where line service will be performed, services ordered, name of someone in your agency to contact and requested service date.

APPENDIX 7 - TROUBLE REPORTING

1. **Trouble Reporting.** Responsibility for repairing telephones depends on the nature of the problem.

2. **Identifying Equipment Problems.** Visually check the equipment for damage and correct connections (see attached trouble shooting guide). Maintenance of the trouble log will assist you in record keeping and future problem analysis.

For equipment repair call the Contractor at:

Local Customer Premise Equipment Trouble:

Black Box (TennMark)	800-766-7687
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FTS Long Distance Trouble:

WorldCom (MCI)	888-387-7821
Sprint	800-387-3667
To determine your Long Distance Carrier:	700-988-1234

Local Line Trouble:

ALABAMA

Statewide – BellSouth	800-405-2955
Mobile – Black Box (TennMark)	800-766-7687
Area Federal Technology Service Office (ATO)	334-690-2251

FLORIDA

Statewide – BellSouth	800-405-2955
Fort Lauderdale – WinStar	888-569-2525
Jacksonville – Adelphia	800-432-0212
Miami Metropolitan Area – Winstar	888-569-2355
Tallahassee – Sprint	800-304-7628
Tampa / St. Petersburg – Verizon	800-483-2000
Black Box (TennMark)	800-766-7687
So. FL Area Federal Tech. Service Office (ATO)	954-893-7700
No. / Central FL Area Federal Tech Svc. Office (ATO)	813-228-2220

GEORGIA

Statewide – BellSouth	800-405-2955
Athens – GT Communications	888-900-4821
Atlanta Federal Center – Vision	404-562-1398/99
Or	404-331-2136
Atlanta Metropolitan Area – Winstar	888-569-2525
Savannah (PBX) – Verizon	912-652-5555
Black Box (TennMark)	800-766-7687
Area Federal Technology Service Office (ATO)	404-331-1223

KENTUCKY

Statewide – BellSouth	800-405-2955
Lexington / London – Verizon	800-483-8860
Black Box (TennMark)	800-766-7687
Area Federal Technology Service Office (ATO)	615-644-5491

MISSISSIPPI

Statewide – BellSouth	800-405-2955
Black Box (TennMark)	800-766-7687
Area Federal Technology Service Office (ATO)	334-690-2251

NORTH CAROLINA

Statewide – BellSouth	800-405-2955
Asheville – TelWare	800-637-3148
Research Triangle Park / Durham - Verizon	800-483-8860
Black Box (TennMark)	800-766-7687
Area Federal Technology Service Office (ATO)	919-239-5237

SOUTH CAROLINA

Statewide – BellSouth	800-405-2955
Columbia – Verizon	800-253-3001
Black Box (TennMark)	800-766-7687
Area Federal Technology Service Office (ATO)	803-765-5976

TENNESSEE

Statewide – BellSouth	800-405-2955
Memphis – Black Box	800-766-7687
Nashville – Adelphia	800-432-0212
Black Box (TennMark)	800-766-7687
Area Federal Technology Service Office (ATO)	615-644-5491

TROUBLE REPORT GUIDE

The Trouble Report Guide contains information on how to determine what the problems are, how to report repair problems, and who to call for repairs. It is important to determine if the problem lies in the equipment or in the telephone line before calling for repairs. Listed below are some system diagnosis questions to ask before making the repair call. If, after performance of the diagnostics, you have determined the problem is with the telephone line, then you should call the appropriate number listed above. Should you determine that the problem is with the equipment, you should contact the POTS contractor at 1-800-766-POTS . When in doubt, please ask for your COTR's assistance.

CUSTOMER PREMISE EQUIPMENT

- Typical Malfunctions**
- Reaching wrong number may indicate bad touch tone pad or that the line button sticks.
 - Burned out button lights can be caused by bad bulbs or other equipment problems.
 - No dial tone could indicate damaged or loose wiring.
- What to do**
- If a single line telephone, unplug the set and try it at another location. If it still doesn't work the trouble is probably the phone.
 - If a feature such as call waiting or speed calling doesn't work, ask.
 - Is that a feature of this unit?
 - Am I using it correctly?

If the answers are yes, try another similar unit at that location. If it works, the problem lies within your set.

REPAIR LOG

A sample repair log is contained in this appendix. You may choose to copy this or design one of your own. Any log should contain the following information:

- a. Name, department and location (building & room) of person reporting the trouble.
- b. Circuit or telephone number of the line(s) affected.
- c. Date and time trouble was noticed.
- d. Whether the trouble occurred on long distance or local service.
- e. The number you called to resolve the problem and if possible, the name of the person taking the call.
- f. A general description of the problem, including what was being done when the problem appeared, whether it was voice or data, and any other information that may assist in clearing the problem.
- g. The ticket number, party responsible for repair, date and time the problem was resolved and an indication that the user has been informed of the repair.

REPAIR LOG

[illegible]

APPENDIX 8 - POINTS OF CONTACT

Contracting Officer

Name: RICHARD S. DRAB
Phone: (404) 331-0158
Address: 401 W. PEACHTREE STREET, NE, SUITE 2700
ATLANTA, GA 30308-2550

Administrative Contracting Officer (ACO)

Name: RUBEN MENDEZ
Phone: (404) 331-0158
Address: 401 W. PEACHTREE STREET, NE, SUITE 2700
ATLANTA, GA 30308-2550

NORTH CAROLINA Contracting Officer's Technical Representative (COTR)

Name: BOB BARRON
Phone: (919) 269-5237
Address: GSA - AREA TELECOMMUNICATIONS OFFICE – 4TTO-RL
110 W. GLENN ST.
ZEBULON, NC 27597-2324

SOUTH CAROLINA Contracting Officer's Technical Representative (COTR)

Name: FAYE DUFFIE
Phone: (803) 765-5976
Address: GSA - AREA TELECOMMUNICATIONS OFFICE – 4TTO-CO
1835 ASSEMBLY STREET, ROOM 171
COLUMBIA, SC 29201-3006

FLORIDA Contracting Officer's Technical Representative (COTR)

Name: GLENDA TYSE
Phone: (954) 893-7700
Address: GSA - AREA TELECOMMUNICATIONS OFFICE – 4TTO-FL
6773 MIRAMAR PARKWAY
MIRAMAR, FL 33023-4874

ALABAMA / MISSISSIPPI Contracting Officer's Technical Representative (COTR)

Name: BARBARA DRANSFIELD
Phone: (251) 690-2000
Address: GSA - AREA TELECOMMUNICATIONS OFFICE – 4TTO-MO
109 ST. JOSEPH ST., ROOM 2022
MOBILE, AL 36602-3630

GEORGIA Contracting Officer's Technical Representative (COTR)

Name: ANNIE STEWART
Phone: (770) 459-6455; (770) 456-2448 Fax
Address: GSA - AREA TELECOMMUNICATIONS OFFICE – 4TTO-AT
77 Forsyth Street, SW, 7th Floor
Atlanta, GA 30303

KENTUCKY AND TENNESSEE Contracting Officer's Technical Representative (COTR)

Name: MICKEY LYLES
Phone: (615) 644-5491
Address: GSA - AREA TELECOMMUNICATIONS OFFICE – 4TTO-NV
1231 Siloam Church Road
Westmoreland, TN 37186

Contractor's POTS Contract Representative

GA, NC, FL (EXCEPT PANHANDLE)

JON PATTON

1-800-444-5780

2707 MAIN STREET

DULUTH, GA 30096

TN, KY, AL, MS, FL - PANHANDLE

KEN THREET

1-800-766-7687

1010 HALEY ROAD

MURFREESBORO, TN 37129-4926

Contractor's POTS Contract Engineering Representative

Name: TODD STATELER

Phone: 1-800-776-7687

Address: 1010 HALEY ROAD

MURFREESBORO, TN 37129-4926

APPENDIX 9 - CONTRACT COMPLIANCE

1. Contract Compliance. GSA is required to monitor the performance of the Contractor. To resolve any problems quickly, immediately document any problems you encounter, as they occur, and submit a noncompliance report (shown below).

SAMPLE - NONCOMPLIANCE REPORT

(Date of report)

(Reporting agency and address)

(Reporting official: name, title, and phone number)

Subject: Report of POTS Contract Noncompliance

To: GSA Telecommunications Division (add address)

In the text provide the following information:

- (1) Purchase order number.
- (2) Brief narrative of the problem.
- (3) Agency actions taken to remedy the situation and their results.
- (4) Agency personnel with immediate knowledge of the problem if other than the reporting officer (provide name, phone number, and title).
- (5) An indication whether the agency desires GSA direct involvement.

Attachment: Copy of purchase order

APPENDIX 10 - INVENTORY

It is to the benefit of the user agencies to maintain a complete and current inventory of telecommunications equipment. A quality inventory, in addition to providing accurate accounting information, will provide a basis for further telecommunications expansion planning. Methods of inventory vary and are addressed in local guidelines.

APPENDIX 11 - GLOSSARY OF TERMS

ABH (Average Busy Hour) - The uninterrupted period of 60 minutes for which the average intensity of traffic is at the maximum.

Alarm Indications - Audible and visual indication of major and minor PBX system alarm conditions. A capability is provided to manually disable the audible alarm.

Alternate Answering - Capability of accommodating more than a single specialized answering position.

Ancillary Equipment - Equipment which is auxiliary or supplementary to a telephone system or instruments. Usually consists of standard off-the-shelf items (e.g. speakerphones, line busy indicators, lamps, etc.).

ARO - After Receipt of Order.

ATB - All trunks (circuits) busy.

Audible Intercom Tone - A generic tone used to describe a separate and distinct tone or buzzer used on an intercom path.

Automatic Privacy - This feature provides the ability for the first station user to seize a free line to obtain sole access to that line, thereby preventing all other stations which have a circuit button appearance of that line from accidentally or intentionally entering that line.

Automatic Re-Dial - Enables a user who has called a busy station line to be connected to the called line when it becomes idle.

AUTOVON - A Department of Defense dedicated voice telecommunications network.

AWT - Actual Work Time.

Bus - 1) Physical transmission path or channel. Typically an electrical connection, with one or more conductors, wherein all attached devices receive all transmissions at the same time. 2) Local network topology, such as used in the Ethernet and the token bus, where all network nodes listed to all transmissions, selecting certain ones based on address identification. Involves some type of contention-control mechanism for accessing the bus transmission medium.

Busy Lamp Field (BLF) - Provides the attendant console with visual indications of either busy or idle conditions for a particular group of station lines selected by the attendant.

CCS - Hundred Call Seconds.

Cable Distribution Frame - A frame used to mount cross connecting blocks, interface jacks, and other materials necessary to cross connect the PBX system, LEC facilities, and building distribution facilities.

CDR - Call Detail Recording - Allows the system to collect information on outgoing phone calls, i.e., number called from, number called to, time of day, and call duration.

Call Forwarding, Busy - Allows calls to busy stations to be forwarded to a number other than the one dialed.

Call Forwarding, No Answer - Allows calls to be forwarded to a number other than the dialed station after a predetermined number of unanswered rings.

Call Forwarding, Variable - Allows calls to a station to be forwarded to a station other than the one dialed.

Call Waiting - Provides a tone to let a user know that a call is waiting

Campus Area - A grouping of buildings housing Government personnel, which may share common structural, utility or management facilities and which are collocated and encompass commonly known boundaries.

CCITT - Consultive Committee for International Telephone and Telegraphic Standards.

Common Equipment - Equipment used that is common to a key system.

Connectorized Line Cord - A length of wire extending from the station instrument to the station interface connector (is as modular as possible).

Consolidated User - A Government agency that uses lines from the General Services Administration (GSA) Consolidated System for local services, i.e., an agency that orders local dial tone from, and is billed by GSA for those local lines, is considered to be a Consolidated User.

Consultation Hold - Any Circuit - An existing call can be held while placing a second call and then returning to the original call.

Continuity - In telecommunications, a complete wire, circuit, or system. A test to ensure that wiring/cabling has no break in it and is suitable for use in a telecommunications system. See toning.

COTR - Contracting Officer's Technical Representative

Customer Premise Equipment (CPE) - Applies to equipment owned or leased by the customer that is located on the customer's premises.

DDD - Direct Distance Dialing

Defect - Any condition or characteristic in any equipment, supplies, and/or services furnished by the contractor under the contract, that is not in compliance with the requirements of the contract.

Delivery Order - An order for telecommunications services, supplies, and/or equipment.

Demarcation Point - The physical point that establishes the end of the telecommunications network (LEC/BOC) and the start of the CPE installation.

De-installation - The disconnect of telecommunications equipment and, when requested by the Government, cable and wiring.

Dial Select Intercom - A single dedicated intercom facility for system-wide use whereby one station contacts another by dialing an intercom code.

Direct In Dial (DID) - Incoming calls are directed to the desired PBX or telephone automatically, without the need for assistance from an attendant or operator.

Direct Out Dial (DOD) - Outgoing calls are placed without the need for assistance from an attendant or operator.

Discriminating Ringing - Provides two different types of station ringing to give audible distinction between incoming internal and outside calls to the station user.

DP Signaling - Dial pulse signaling. (See Rotary Dial)

Dropping and Remounting - The temporary disconnection and subsequent re-connection of a connector to an in-place station instrument for the purpose of allowing for such matters as construction, carpet laying or furniture rearrangement. The re-connection is such that the operations function of the station instrument is restored.

DTMF Signaling - Dual tone multi-frequency signaling. (See Tone Dial)

EKTS - Electronic Key Telephone System.

Embedded Base Equipment - Equipment on hand that was being leased from the Local Exchange Company prior to the divestiture of the American Telephone and Telegraph Company.

EMI - Electro-Magnetic Interference.

Equivalent - Comparable mixes and models of equipment provided by different manufacturers. See "Like Government Owned Equipment".

Exclusive User - An agency that receives local dial tone directly from the local exchange company and is not billed by GSA.

Flexible Station Controlled Conferencing - A station initiated conference capability that allows non-pre-selected internal stations as well as outside trunk circuits to be added into a conference situation.

Free On Board (FOB) - without charge for delivery to and placing on board a carrier at a specified point.

FTS 2000 - A modernization of the FTS. Will provide analog/digital telecommunications at high speed over digital networks.

Hold Capability - The ability to place an incoming or outgoing call on hold.

Identical Equipment - Same manufacturer, type, and model number.

Industry Standard Instruments - Refers to traditional single-line and multi-line station instruments that are compatible with 1A2-type key service units.

Industry Standards - Equipment and all associated services which meet the Electronic Industry Association, Institute of Electrical and Electronic Engineers Incorporated, and the Consultive Committee for International Telephone and Telegraphic standards.

Installation - The initial setting in place and connecting of telecommunications equipment, cabling, or cable cross connects.

ISDN - Integrated Services Digital Network - Project underway with the CCITT for the standardization of operating parameters and interfaces for a network that will allow a variety of mixed digital transmission services to be accommodated.

Key System - A system where key telephones are terminated on a single common key equipment to provide line illumination, wink hold, and normally an intercom capability to interconnect key system users.

KSU - Key Service Unit.

KTU - Key Telephone Unit.

Latent Defect - A defect that existed at the time of acceptance but was not capable of discovery by a reasonable inspection.

Like Government Owned Equipment - Comparable makes and models of equipment provided by different manufacturers. Equivalent.

Line Lockout with Warning - Gives about ten seconds of warning tone and then holds the line out of service if a user takes longer than ten seconds to start dialing.

Local Exchange Company (LEC) - The local tariffed telephone company that provides local service to a given area.

LSI (Line Status Indicator) - A lamp field to indicate that a circuit is busy.

LTOP - Lease to Ownership Plan.

Major Failure - Operational failure of more than five single instruments for five hours or more if there is no alternate equipment available, or failure of a PBX.

Move - Relocation of telecommunications equipment within a building or campus area.

Multi-frequency Signaling - Use of combinations of voiceband frequencies to generate telephone address digits, precedence ranks, and line or busy trunk indicators.

Multiple Trunk Group Capability - The system is capable of being equipped (and accessed accordingly by individual dial codes) for more than one group of outgoing trunk circuits.

NNX - General code for central offices where N = numbers 2-9 and X = number 0-9.

Non-Proprietary Telephones - Industry standard instruments, such as single line and multi-line station instruments, which are compatible with 1A2-type key service units.

Nonrecurring Charges - Onetime charges such as charges for installation, reinstallation, disconnection, and rearrangement.

OEM (Original Equipment Manufacturer) - A company which manufactures a product, or line of products, which are marketed under another company's name.

On Net - A dedicated FTS subscriber.

Off Net - A non-dedicated FTS subscriber.

Outgoing Call Restriction by Station - The ability to restrict any given station instrument from originating calls on outside lines.

PABX - Private Automatic Branch Exchange.

Power Variation - A fluctuation in current or voltage, usually followed by a return to the normal value.

Proprietary Telephones - Telephones of unique design that are required for use in a specific system to provide special facilities or features. Normally, such instruments are not compatible with other types of systems.

Purchase Order - An order from an agency for equipment or services which obligates the Government for the amount therein.

RFI - Radio Frequency Interference.

Rearrangement - Pertains to changes to in-place station equipment functions, i.e., line pickups, intercom codes, audible signaling arrangements, etc.

Reinstallation - Installation of previously de-installed telecommunications equipment outside a building or campus area or installation of previously stored equipment.

Rotary Dial - Outward calls are made by the transmission of outpulses to the telephone switching equipment.

STU III - Secure Telephone Unit, third generation.

Sneak Currents - Any current, not intended for system operation, that could hamper the operation of, or cause a failure to, a telecommunications system.

SMDR (Station Message Detail Recording) - Processor generated records of all calls originated and/or received by a PABX system.

Station Call Transfer - The ability of a station user to transfer a call without the help of an operator.

T1 Carrier - A time division multiplexed digital transmission facility, usually operating at an aggregate data rate of 1.54M bits.

Tone Dial - Outward calls are made by the transmission of Dual Tone multi-frequency signaling to the telephone switching equipment.

Toning - The act of checking continuity of wiring or cabling to enable identification of the starting and ending points and to ensure that the wiring/cabling has no breaks in it and is capable of being used to support an operational circuit. Usually accomplished by the use of a battery-powered device that activates an audible or visual signal if the loop tested is continued.

Vacant Number Intercept Recording - Advises callers to an unused number that the number is not in service.

Working Days - Monday through Friday, excluding Federal Government holidays.

Wire Cross-Connects - Wire cross-connects are short lengths of wires (called jumper wires) used to link together the cable pairs at two circuit termination points.

X.25 - A CCITT recommendation that specifies the interface between user data terminal equipment (DTE) and packet-switching data circuit-terminating equipment (DCE).

1A2 Key Telephone System - Refers to traditional key telephone systems of the 1A2 type spanning many generations of equipment.